

W5YI

National Volunteer Examiner Coordinator

REPORT

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December 15, 1991

FCC REFUSES TO RESTRICT AMATEURS IN RFI CASES

Neighbors demand protection from ham emissions; commission rejects petitions

The FCC has said "case closed" to two unusual, long-running conflicts between radio amateurs and their neighbors over susceptibility of home electronic products to radio-frequency interference (RFI) and television interference (TVI).

In one case, neighbors actually filed a *Petition for Rulemaking* to restrict amateur "broadcasting". They proposed to prohibit private amateur transmitters in areas of dense population -- hams would have to use "remote, multi-user broadcast facilities" instead!

In the other case, a neighbor -- after extensive, unsuccessful legal proceedings against an amateur -- appealed to lawmakers for help. He argued, among other things, that the advent of communications satellites has rendered the Amateur Service "largely obsolete". The request was treated as a *Petition for Rulemaking* by the FCC, which defended its policies and declined to stop the amateur operations.

The FCC responses are contained in a similar letter sent to both neighbors. The FCC letter is reprinted later in this story. It may provide some guidance and moral support to hams who face irate, or even threatening, neighbors who own interference-prone consumer products. (Yet, it

leaves us wishing for a better world in which the FCC would really "favor" amateurs by setting mandatory standards for product RF immunity and/or immunity labeling.)

Case 1: Berkeley

Charles and Sylvia Schwartz are neighbors of *David Pugatch/KI6WF* in Berkeley, California. The couple met with FCC Engineer In Charge S. Marti-Volkoff and his staff in the San Francisco Field Office, and recorded their meetings in detailed notes.

"For the past few years my wife and I - and a number of our other neighbors as well - have been burdened with the problems of severe radio frequency interference in our home electronics equipment, due to the amateur radio operations of our next door neighbor," Mr. Schwartz wrote in his *Petition for Rulemaking*. "Despite the best efforts of ourselves, our neighbor, the local amateur radio club, and the FCC field office these problems have not been resolved.

"In March of this year [1990] we met with the local FCC officials to let them know the seriousness of this continuing problem and to explore with them all possible avenues of solution. We have also

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attempted to communicate with the *Electronics Industry Association* and with the *American Radio Relay League*, but have received no significant assistance from these organizations.

"Inasmuch as we have exhausted all reasonable alternatives, we now petition the FCC for a change in rules in order to gain a full restoration of our rights. The following language is proposed for this new rule:

"Amateur radio stations may not be operated in any manner that causes interference with the normal use and enjoyment of consumer electronics products by neighboring residents. Any amateur licensee who has failed to resolve such interference problems voluntarily shall, upon an appropriate complaint being filed with the FCC, be ordered to restrict broadcasting so as to avoid such interference or suffer revocation of license."

Mr. Schwartz said the FCC could include an exemption to the rule to cover situations of local emergency. They suggested several specific restrictions to accomplish the aim of the rule. Their restrictions include:

Bell-wire for "shut-down"

"The broadcaster should agree to emit only during those hours when neighbors do not expect to use their vulnerable home electronics equipment. This would certainly place some restrictions on the broadcaster, but it is assumed the hours would be negotiated in a reasonable and balanced way among the neighbors.

"The broadcaster should agree to shut down on demand when neighbors so request. This also, requires a good deal of balance and fairness to be practiced among the neighbors. A bell-wire strung between houses is a simple way to achieve this communication.

"The broadcaster should avoid broadcasting in those particular modes known to cause serious RFI for the neighbors.

"Amateur broadcasters may not use a private transmitter in heavily populated areas; they would have to pipe their transmissions to some remote antenna. There is a question of cost here; but remote multi-user broadcast facilities may be feasible."

"Everyone passes the buck"

Excerpted below are the couple's notes of FCC meetings ("They" refers to FCC staff):

"They said the FCC takes no responsibility for telephone problems. They said we were lucky Dave has done so much to help solve the problems. We complained that our problems have been reduced but have not been solved; and we asked for their help. They said that they have done everything they can within their procedures. Upon questioning, they clarified the difference between 'Legislation' (done by Congress), 'Regulations' formally adopted by the FCC, and 'procedures' (bureaucratic habits of enforcing, or not enforcing, the above). ...

"They said that to get this done we would have to go beyond their level (SF Office) and write to the FCC in Washington (they even gave us the address!) They said that there is legislation on the books which requires that this be done, but it is not followed, not enforced. Manufacturers of consumer electronics say that this is such a small problem, only a small percentage of people are affected. They said that the number of complaints received about interference problems has been decreasing in recent years. We asked how many complaints they currently get, in the SF office, of the sort that we have; they replied: a few hundred complaints per year.

"They explained that the *Electronics Industry Association* (EIA) tells the FCC that they (the manufacturing industry) will handle the public's problems (thus the FCC stays out of it). We said that we had tried this, calling Sony, ATT [sic] trying to get useful advice on the interference problems. Dave also did this, talking to the engineers of a couple of manufacturers about our problems. None of this provided any help.

"We repeatedly asked who could give reliable advice. Why shouldn't the government (the FCC) be the ones to provide the needed guidance. They said: go to the manufacturers, go to the ARRL (American Radio Relay League), the amateur's group that has a project to survey consumer products for this problem. Would the FCC help? Sorry, No. (It was clear that nobody wants to take responsibility, everyone passes the buck.)"

Case 2: Tucson

In several prior issues, we reported on the bitter dispute between *Joe Michaels/W4DDV* of Tucson, Arizona and his neighbors over alleged RFI problems.

Michaels, a ham for 50 years, moved from Ft. Lauderdale, Florida to his new QTH in May of 1989 after searching for a community that does not restrict

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I am a currently licensed Advanced, Extra Class amateur radio operator and wish to be a volunteer examiner. I have never had my station or operator license revoked or suspended. I do not own a sid-

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amateur antennas: "The reason we bought the property was that the deed restrictions expired in 1983," he said. (See Oct. 1, 1989 Report, page 9.)

Mr. Arthur R. Still, a geologist, wrote an impassioned eight-page letter to congressional representatives, detailing his experiences since W4DDV moved next door in 1989. (Among the devices Mr. Still allegedly received interference with, he owns eight touch-control lamps. Such lamps are infamous for their erratic operation in the RF environment.)

"Under current FCC practice, they regulate only airborne radio waves and airborne TV signals," Still wrote. "All other problems due to radio electromagnetic interference (EMI) - that is with telephones, cable TV, answering machines, fax machines, computers, touch lamps, etc. is not regulated by the FCC (sic), although they are the only federal agency that deals with the ham radio operator. According to the FCC it is the sole responsibility of the manufacturer of the appliance to build in protection for the consumer.

"If a ham radio operator has his transmitter and/or tower so close to his neighbor's house that he completely overpowers the 'built-in' protection in telephones, cable TVs, touch lamps and/or other modern day appliances, and if he happens to be 'legally licensed' by the FCC, then it is (as far as the FCC is concerned) just too damn bad. The FCC will take no action against said ham radio operator, and in effect he has a 'license' to completely destroy the peace and tranquility of his neighbor's home. There is also the aspect of possible negative health ramifications from being subjected to undesirable strong, albeit sporadic, electromagnetic fields.

"Further, it appears that the Superior Court system in Arizona is of the opinion that the federal government (the FCC) has 'exclusive jurisdiction' to resolve radio frequency interference problems, and that the federal government has 'preempted' the State's rights to common law nuisance principles in this area. Since the FCC will not act in a responsible manner, and since they are the only federal governmental agency which regulates ham operators, I cannot agree with the Superior Court's judgement in this matter, and I am now in the position of asking the Arizona Supreme Court to review a decision by the Court of Appeals which upheld an earlier Supreme Court decision holding that the State of Arizona had no standing in my litigation (Tort Non-Motor-Nuisance) with my neighbor. ...

"Further, a reading of the current FCC regulations (Title

47 of the Code of Federal Regulations, Parts 80 to end) sound as if they were not only written for the total benefit of the ham radio operators, but as if they were written by the ham radio operators themselves. ..."

Still explained that he confronted amateur Joe Michaels about the interference, who continued "broadcasting" anyway (although Michaels offered to give Still the FCC's address in order to file a complaint). Still later met with a Public Affairs Specialist at the FCC's Douglas, Arizona office. This meeting led him to conclude that "the FCC leaned very heavily towards the amateur radio operators, and that I would find no viable solution to my problem through the FCC."

The FCC specialist had suggested that representatives of the local Amateur Radio club could assist as technical advisors and impartial observers of the RFI problem. "I told her that this was not satisfactory to me, in trying to accommodate this man's hobby I had already had enough strangers coming in and out of my house (Michaels, phone linemen and TV technicians) for a period of several weeks, and I certainly could not see where his ham radio buddies would be in any way impartial."

Still tried to get the FCC specialist to say that the Commission would shut down W4DDV if no solution were possible to the interference. He also asked that an FCC engineering team visit his house. The FCC specialist informed him that the FCC would try to "work out a compromise" with the amateur and that it might be months before FCC engineers could visit.

After Still filed suit against Michaels in a county court, and another neighbor contacted Congressional representatives, the FCC called Still to say that they "suddenly" (in Still's words) had some engineers that could come to examine the situation. They eventually did inspect the station; Still said that Michaels "got rid of an amplifier" after their visit. The Stills' cable TVI diminished but other interference problems allegedly remained.

The court found that the FCC had exclusive jurisdiction over Amateur Radio communication, and it dismissed the suit. Still began a lengthy appeals process. The appeals court affirmed the county court's decision; Still filed for review of the appeals court action; and the case file was forwarded to the Arizona Supreme Court for review. Still wrote that if the state Supreme Court does not find in his favor, he will try to get a federal judge to remand the case back to the state or to order the FCC to revoke the license of W4DDV.

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FCC Responds

The Commission sent a similar letter to both the Schwartz and the Still families. The letter mentions the FCC's Congressionally-granted -- but not yet utilized -- authority to set standards for RFI immunity.

Here is the text of the letter sent to Mr. Still, sent Nov. 27, 1991:

"Dear Mr. Still:

"This is in response to your request for amendment of the Commission's Rules for the Amateur Radio Service. You believe the laws applicable to interference that electronic equipment in a home receives from radio frequency energy are inadequate. Additionally, you disagree with Congress' decision to give the Commission exclusive jurisdiction over interference to home electronic equipment, systems and devices.

"Section §302(a)(2) of the *Communications Act of 1934*, as amended, 47 U.S.C. §302(a)(2), authorizes the Commission to regulate home electronic equipment and systems by establishing minimum performance standards for such equipment to reduce their susceptibility to interference from radio frequency energy. See 96 Stat. 1087, 1091-1092.

"The conference Report associated with this section indicates that 'the legislation does not mandate Commission exercise of this authority; that decision is well within the technical expertise of the agency.' The Report also indicates that the Commission, in exercising this authority, is expected to balance the cost of improving the performance of a device against the overall public benefit to be gained. See H. Rep. No. 765, 97th Congress, 2d Session (1982), at 32-33.

"Because most users of home electronic equipment do not receive such interference, we do not wish to impose the additional costs associated with reduced susceptibility on all users of such equipment, including millions of users who would not benefit.

Not rational to place all blame on hams

"Likewise, it is not reasonable to place the burden for resolving all interference problems on amateur service licensees. Congress recognized that electronic equipment manufacturers also have a responsibility to design properly their equipment to prevent interference. We believe that the Commission's Rules properly reflect Congressional desires.

"The issue of interference to home electronic equipment is being addressed by industry. A committee has been formed under the auspices of the American National Standards Institute to develop, voluntarily, standards to reduce the susceptibility of this equipment to interference. The Commission's long-standing policy, as well as that of the Federal Government in general, is to rely on private industry voluntary standards whenever possible. At our encouragement, the *Electronic Industries Association* (EIA) developed, in 1984 and 1987, two susceptibility standards for television receivers.

"These standards were developed using *American National Standards Institute* procedures. Recent figures provided by the EIA indicate that virtually all new color televisions and VCRs voluntarily comply with these standards. Additionally, the number of complaints we receive about interference to home electronic equipment has dropped significantly since 1982.

"Earlier this year, the *Telecommunications Industry Association* adopted a standard for telephone terminal equipment that contains product goals for electromagnetic interference susceptibility. In addition, international standards on interference susceptibility are being developed for a wide variety of electronic products. Although compliance with these standards is voluntary, we expect their development will spur electronic equipment manufacturers to consider potential interference problems when designing their equipment.

"Interference to the type of electronic equipment you mention in your letter does not give the Commission a basis to restrict the operation of your neighbor or modify his license. See Sections §15.1, §15.5(b) and §97.121 of the Commission's Rules, 47 C.F.R. 15.1, 15.5(b) and 97.121.

Additionally, the *Communications Act* grants a station licensee certain rights, such as a right to a hearing, before the Commission can modify a station license. See Section §316 of the *Communications Act of 1934*, as amended, 47 U.S.C. 316.

"Based on the above, we conclude that your proposal is not in the public interest and does not warrant consideration by the Commission. Accordingly, pursuant to Section §1.401(e) of the Commission's Rules, 47 C.F.R. 1.401(e), IT IS ORDERED that your request for rulemaking IS DENIED.

/signed/ "Sincerely,
Robert H. McNamara
Chief, Special Services Division."

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OCTOBER VE PROGRAM STATISTICS

October	1989	1990	1991
No. VEC's	*18	*18	*18
Testing Sessions	512	536	839
<i>VEC</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>
ARRL	35.2	36.0	44.6
W5YI	41.4%	45.0%	37.5%
CAVEC	5.7	4.1	4.6
DeVRY	5.7	3.5	4.3
Others (14)	12.1	11.4	9.0
Year-to-Date Sessions	4540	5014	6563
Elements Administ.	7454	8206	16972
<i>VEC</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>
ARRL	44.0%	40.0%	49.1%
W5YI	31.8	39.1	31.1
CAVEC	6.4	5.0	3.9
DeVRY	4.5	4.8	3.6
Others (14)	13.3	11.1	12.3
Year-to-Date Elements	80598	86758	140850
Applicants Tested	4613	5132	10251
<i>VEC</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>
ARRL	42.9%	39.8%	48.3%
W5YI	32.5	39.4	31.4
DeVRY	5.2	5.4	4.6
CAVEC	5.6	4.2	3.6
Others (14)	13.8	11.2	12.1
Year-to-Date Tested	48265	53048	84745
October	1989	1990	1991
Pass Rate - All	62.0%	60.5%	67.5%
Applicants/Session	9.0	9.6	12.2
Elements/Applicant	1.6	1.6	1.7
Sessions Per VEC	28.4	29.8	46.6
Administrative Errors by VE's/VEC's			
October	1989	1990	1991
Defect. Applications	0.4%	1.0%	0.7%
Late Filed Sessions	1.2%	1.5%	1.5%
Defective Reports	0.4%	0.6%	0.4%

VEC TESTING ACTIVITY BY YEAR

Year	Sessions	Persons	Pass Rate	Elements	Increase
1985	3223	41439	58.2%	62589	--
1986	3784	42442	59.7%	61921	(-1.1%)
1987	4378	49728	60.6%	81042	+30.9%
1988	4093	53536	61.0%	89788	+10.8%
1989	5486	57417	61.5%	96092	+7.0%
1990	6250	64737	60.8%	105763	+10.1%
1991 (*)	* 6563	* 84745	* 66.2%	* 140850	+33.2%

* 1991 = 10 months. All others: Full calendar year.

[Source: Personal Radio Branch/FCC; Washington, DC]

OCTOBER AMATEUR LICENSING STATISTICS

October	1988	1989	1990	1991	
New					
Amateurs:	923	1811	1826	4501	
Upgrading:					
Novices	953	1454	1456	1073	
Technicians	356	533	810	893	
Generals	307	357	620	527	
Advanced	<u>257</u>	<u>288</u>	<u>325</u>	<u>398</u>	
Total:	1873	2627	3211	2891	
Renewals: (*)					
Total Renew:	2120	* 193	* 63	* 52	
Novices	185	29	* 9	* 5	
Deleted:					
Total Dropped:	615	*1175	*1922	* 41	
Novices	221	515	* 977	* 22	
Census:					
Indiv. Oper.	436963	466971	495166	536532	
Change/Year	+6217	+30008*	+28195*	+41366*	
Individual Operators by Class: (and % of total)					
Extra	Advan.	General	Technic.	Novice	Total:
October 1988					
46413	98386	112954	100176	79034	436963
10.6%	22.5%	25.9%	22.9%	18.1%	100.0%
October 1989 (*)					
49883	101725	116797	113786	84780	466971
10.7%	21.8%	25.0%	24.4%	18.1%	100.0%
October 1990 (*)					
53219	104771	119393	126050	91733	495166
10.7%	21.2%	24.1%	25.5%	18.5%	100.0%
October 1991 (*)					
56954	107370	122301	153514	96393	536532
10.6%	20.0%	22.8%	28.6%	18.0%	100.0%
Club/					
RACES &	(1988)	(1989)	(1990)	(1991)	
Military:	2288	2462	2434	2431	
Total Active:	439251	469433	497600	538963	
% Increase	+1.4%	+6.9%*	+6.0%*	*+8.3%*	

(*) NOTE:

The number of amateurs in 1989, 1990 and 1991 is not comparable with prior years. Due to the implementation of the 10-year term license in 1984, amateurs who would ordinarily be dropping out of the Amateur Service between 1989 and 1993 by not renewing will be carried on the amateur roles for another five years before being purged from the FCC's data base. This has the effect of overstating the ham census between 1989 and 1991 since the records of silent keys and non-renewals will not be deleted. The fastest growing class is Technician with 53,000 - or 53% - more Techs than just three years ago!

[Source: FCC Licensing Facility, Gettysburg, PA]

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NUMBER OF NEW AMATEURS DOUBLES!

Figures released by the FCC continue to show that abolishing the Morse code requirement is causing the number of new hams to increase dramatically. The average number of first time Amateur Radio licensees for the period April through October 1991 is more than 100% greater than the average of the four prior years.

The first Codeless Technician operator license was mailed on March 12th, 1991. April was thus the first full month of issuing the (no-code) Technician class license. 29,399 newcomers joined the Amateur Radio ranks between April and October - an average of 4200 a month. This compares with an average of 2065 for the same period during the last four years. Note during 1991, 65% of all newcomers entered ham radio via the code-free Technician path. Only 33% entered as a Novice operator. Here are the figures for the seven month period over the last five years:

Class	Newcomers to the Amateur Radio Service							
1987	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
Nov	2850	6406	1603	741	721	1599	713	14633
Tech	63	278	186	107	164	242	149	1189
Other	37	113	61	22	33	76	20	362
Total	2950	6797	1850	870	918	1917	882	16184
Average :	2312	[1986 = 12,430] Increase: +30.1%						

1988	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
Nov	1996	2714	1284	1643	1128	827	728	10320
Tech	168	233	186	172	182	204	153	1298
Other	31	55	24	27	37	28	42	244
Total	2195	3002	1494	1842	1347	1059	923	11862
Average Newcomers:	1695						Decrease: (-26.7%)	

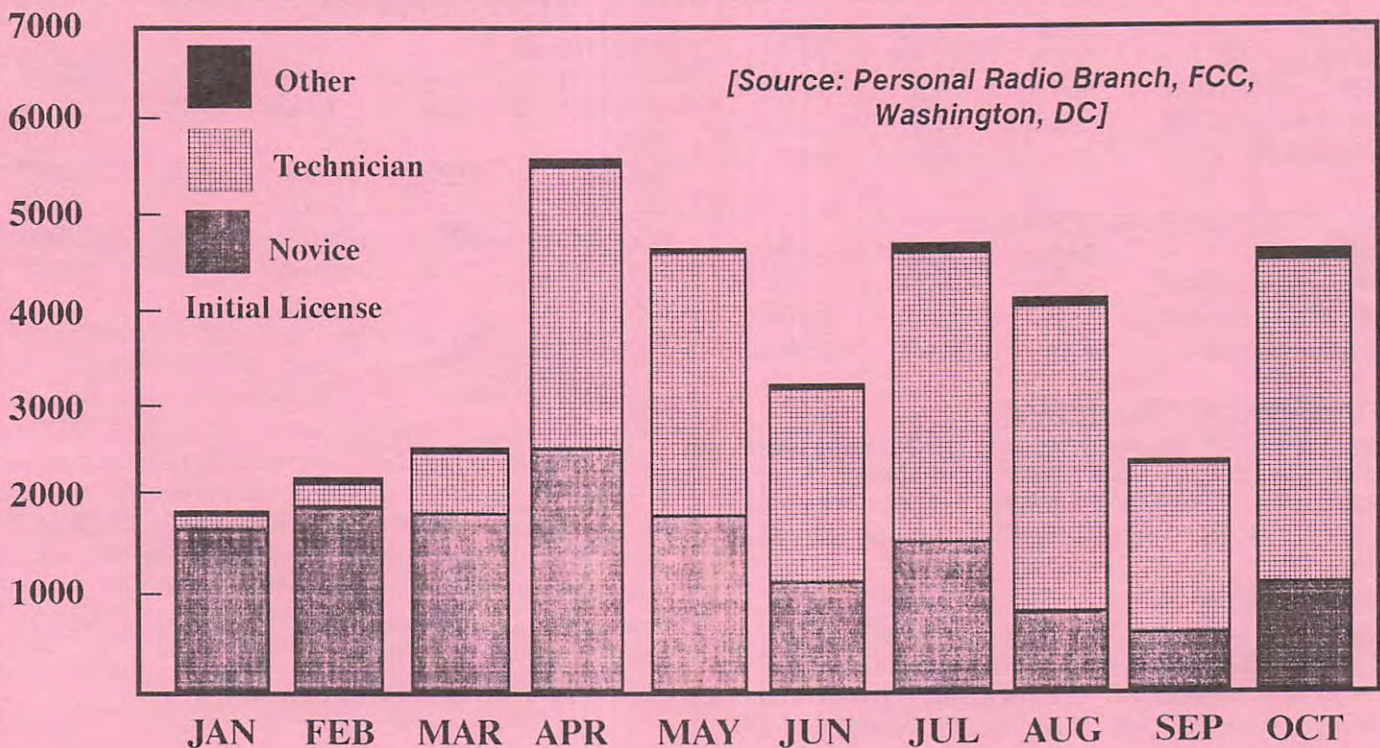
1989	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
Nov	2512	2869	1805	1301	1288	1160	1556	12491
Tech	255	356	176	251	159	158	220	1575
Other	54	77	22	49	41	41	35	319
Total	2821	3302	2003	1601	1488	1359	1811	14385
Average Newcomers:	2055						Increase: +21.3%	

1990	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
Nov	2368	3875	1724	1665	893	1382	1457	13364
Tech	239	359	214	269	158	128	283	1650
Other	51	50	46	69	38	42	86	382
Total	2658	4284	1984	2003	1089	1552	1826	15396
Average Newcomers:	2200						Increase: +7.0%	

1991	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
Nov	2651	1801	1088	1662	872	679	1070	9823
Tech	3025	2858	2112	2932	3180	1680	3354	19141
Other	73	55	31	82	69	48	77	435
Total	5749	4714	3231	4676	4121	2407	4501	29399
Average Newcomers:	4200						Increase: +91.0%	

The following chart graphically shows the interest in the Codeless Technician entry level class.

New Licensees - Amateur Service - 1991



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● The FCC has Denied and Dismissed a *Petition for Rulemaking* received July 26, 1991 from **Scott Schoenbleben, N4UAD** of Liberty, KY. Scott requested \$97,305 be amended to prohibit AM (A3E) and FM (F3E) emissions in any portion of any amateur band below 28 MHz.

"Just as it was necessary to eliminate the spark gap transmitter in order to better utilize the resource of available band spectrum, it is now necessary to limit emissions in the phone bands below 28 MHz to narrow modes which offer the greatest potential for maximum utilization to all users. ...a single AM signal six or more kHz wide may eliminate the communications ability of several nets and up to 100 individual stations in net or round table operations."

Schoenlaben said "Since virtually all modern day equipment manufactured in the past 25 years may be operated in single side-band J3E service... For those who wish to operate with AM A3E emissions for nostalgic or experimental reasons, the two megahertz available from 28 to 30 Mhz (sic) should offer ample opportunity."

The FCC responded by stating "In 1981, we considered a request from another amateur service licensee that we delete AM as an authorized emission type in the amateur service. We denied this request, finding that deleting an emission type conflicted with the basis and purpose of the Amateur Radio Service... We reiterated this finding in 1990 when we denied another request to delete AM and stated that deleting AM was still inconsistent with our desire to offer amateur operators the opportunity to experiment with practically every emission type. Your request to delete FM emissions below 28 MHz is also inconsistent with the basis and purpose of the amateur service for the reasons stated..."

● The FCC also responded to a letter from **James H. Larson, WB4KQQ** of Memphis, Tennessee, requesting that the commission "...change its definition of a frequency coordinator and narrow the group of licensees who are eligible to decide who will be recognized as the local frequency coordinator."

John B. Johnston, Chief of the FCC's Personal Radio Branch said that back in 1986 "...the commission rejected increased involvement in the repeater coordination process. Instead, it sought to promote the voluntary resolution of repeater interference disputes at the local or regional level by amateur operators themselves...."

"The Commission decided that a frequency coordinator is an individual or organization recognized in a local or regional area by amateur operators whose stations are eligible to engage in repeater or auxiliary operation.

"It also decided that the authority of a coordinator is best derived from the voluntary participation of the entire local or regional amateur community and that the coordinator's recognition must be derived from the same source."

The FCC sent Larson a copy of an August 1988 order which again addressed the frequency coordinator question. That ruling was in response to a petition filed by **Karl V. Pagel, N6BVU**.

Pagel wanted frequency coordinators to be selected repeater owners and/or trustees rather than those eligible to engage in repeater or auxiliary operation. In denying the Pagel petition, the FCC said: "It is not evident that coordinators selected only by those already in repeater and auxiliary operation could also fully consider the concerns of all those eligible to use the spectrum affected by such operations. To emphasize the role of existing operations at the expense of prospective operations

would be inconsistent with the Commissions's desire to recognize and encourage the experimental nature of the amateur service."

● Catherine Forster, 51, an FCC Office Automation Clerk and a twenty year veteran of the New York City field office was **killed by an assailant**, Wednesday, Nov. 27 as she was leaving the building at the end of the day to drop off mail at the post office.

Jeanette Demarest, 53, of Greeley, Colorado was taken into custody at the scene and has been charged with second degree murder and criminal possession and use of a weapon. A .22-caliber automatic handgun was found in her purse.

Demarest, who was known to the New York FCC field office, thought radio waves were intruding into her life. She said the FCC had been conducting illegal surveillance of her and that she had filed a lawsuit against the agency to stop the harassment.

● The Dec. 2nd issue of **RCR (Radio Communications Report**, a wireless communications industry trade publication) tells about an all day (Nov. 14th) conference co-sponsored by the FCC - addressing the **"refarming" of radio spectrum below 470 MHz**. Ralph Haller, FCC Private Radio Bureau Chief reportedly said **refarming** "...is going to form probably the basis of regulation for the next 20 to 30 years."

"Refarming" is the new buzzword for "...restructuring crowded frequency bands by means of new technology and policy changes [and] is an extremely complex and potentially controversial undertaking since it could involve relocating or dislocation of existing radio users along with financial consequences that follow." Hopefully none of the 38 MHz involved in the project affects the amateur service.

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• *The CQ Bookstore has been sold to J. Craig Clark, NX1G of Rindge, New Hampshire. The operation has been renamed the Ham Radio Bookstore and will concentrate on marketing books, publications and software for the electronics industry. Additionally, Ham Radio Bookstore will be actively pursuing new book projects to add to the products it currently purchases from others. Operation will continue at the Greenville, NH address through mid-December when the Bookstore will be moved to Rindge, NH.*

Clark is the ex-Assistant Publisher of *Ham Radio Magazine* and *Communications Quarterly*. Coming to Ham Radio from ARRL where he was sales manager for League books and publications, Clark has over 16 years of experience in telephone sales and direct mail marketing to consumers and the electronics industry. Current plans are to concentrate on distributing books for amateur radio, computers and the electronics hobbyist. HR Bookstore also will continue to participate in trade shows and conventions. (Tel. 800/457-7373.)

• *Special event Canadian Amateur Radio call sign prefixes!* The Canadian Dept. of Communications has authorized the following amateur radio prefixes to commemorate the:

(1.) 75th Anniversary of the *National Research Council of Canada* (Nov. 20 to Dec. 20, 1991) and...

(2.) the 500th Anniversary of the *Discovery of America by Columbus* (Jan. 1 to Feb. 29, 1992)

May use prefix (1.)		(2.)
VE1-VE8	XN1-XN8	VC1-VC-8
VO1, VO2	XO1, XO2	CY1, CY2
VY1, VY2	VX1, VX2	CZ1, CZ2
VY9	VX9	CZ9

• *Walt Henry, W6ZN, founder of Henry Radio died the last weekend*

in November due to complications caused by Emphysema. Walt was 80 years old having been born on 11/11/11. (Thanks: WA6ITF)

• *Advance general admission tickets for the Dayton HamVention will remain the same* (\$10.50) but tickets purchased at the door will increase by \$1.00 to \$14.00. Flea market space prices also have been increased by \$5 to \$30. HamVention is held the last weekend in April (Thanks: WA8DQH)

• The Jan. 1992 issue of *"Soldier of Fortune"* carries a Central Mobile Communications (Deer Park, NY) display advertisement for 5-watt Motorola VHF 2-way personal and business-use radios. Ad says *"Stay in Contact! In the Field, On the Farm, In the Plant"* but fails to mention that you need an FCC license to use them. (800/456-9300)

• The November 27th *Los Angeles Times* newspaper carried an extensive article on how French adventurer, *Gerard d'Aboville, TM6ABO* would use his ham radio every day to call *Fred Boehme, KH6UY* in Hawaii on 14.313 MHz to report his progress in rowing across the north Pacific Ocean.

Gerard rowed 40 or more miles a day enroute to his goal of becoming the first person to row the 6,300 miles from Choshi, Japan to the United States. He arrived in Ilwaco, Washington on Nov. 21 after being at sea for 134 days. He also is the first (and only) person to row solo across the Atlantic from Cape Cod to France. That took him 72 days. (The Pacific Ocean is twice as wide as the Atlantic.)

d'Aboville used global positioning satellites to confirm his location. "A ham radio kept the mariner in touch with France and the network of Pacific radiomen who included Fred Boehme in Hawaii."

• We got a letter from *Ed Westcott, W4UVS* correcting us on our Dec. 1st statement that the doctor who brewed the poison Koolaid at the Peoples Temple in Jonestown, Guyana was WB6MID/8R3. Doctor Laurence E. Schacht apparently used the call sign as a member of Jim Jones staff but it belonged to Albert A. Touchette of Redwood Valley, California. Touchette's body was one of the over 900 found dead at Jonestown. (This information is from a book Ed is writing "Out of Sight Out of Mind", about the Jim Jones misuse of Amateur Radio.)

• The *International Amateur Radio Union (IARU) Region 2* monitoring system needs *help in translating the "IARU Monitoring Manual" into Spanish*. The guide will be used by Spanish-speaking areas in Region 2. "The task is about 40% complete with about 45 pages remaining," *Mark Allen, WJ7X* writes. "We have a deadline of Jan. 15, 1992." If anyone can assist, please contact Mark at (voice) 612/943-5554 or FAX: 612/442-9730.

• The *Japan Amateur Radio League (JARL)* reports that as of Oct. 4, 1991, the Japanese Ministry of Posts and Telecommunications *increased maximum amateur radio output power in the 28 MHz band* from 50 to 500 watts, although it is still restricted to 50 W or less for repeater stations.

The MP&T also disclosed that Japan has 1,638,912 personal use (CB?), 1,405,377 business use and 1,124,018 amateur radio stations.

• The FCC's Gettysburg licensing facility advises that successful *Novice Amateur Radio application Form 610's should be forwarded to: FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245* (rather than to the previous P.O. Box #1020 address.)

Only \$9.95 plus \$2.00 shipping charge
Containing all (nearly 2000) questions, multiple choices and answers in every ORDER FROM:
NEW!!
The Radio Amateur's LICENSING HANDBOOK is for everyone who wants to know about amateur radio license tests, amateurs

W5YI REPORT

National Volunteer Examiner Coordinator

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December 15, 1991

NATIONWIDE WIRELESS NETWORK PROPOSED

The day may not be far off when the public will be able to communicate two-way in real-time coast-to-coast using a tiny battery-powered notebook computer sporting a small antenna. Mtel (Mobile Telecommunication Technologies Corporation) has filed a massive *Petition for Rulemaking* urging the FCC to establish a new commercial Nationwide Wireless Network ("NWN") Service. The petition was submitted by the prestigious Washington Law Office of Wiley, Rein & Fielding. This is the same law firm that was very active on behalf of commercial users during the 220-222 MHz reallocation. Richard Wiley is a previous FCC chairman.

Mtel seeks an allocation of 150 kHz in the 930-931 MHz band. Since 50 kHz is required for a single network, three competing licensees would be able to establish high capacity two-way nationwide data networks. These networks would be located just above the amateur 902-928 MHz ham band.

Mtel has extensive experience in designing, constructing and operating high technology wireless communications services. Mtel's subsidiary, "SkyTel", presently operates a one-way "secure" nationwide paging service using sophisticated spread-spectrum technology. Users simply telephone a toll-free "800" number and a computer guides the caller through the various functions of sending a satellite message. Voice messages are then uplinked to a satellite which rebroadcasts them simultaneously to each downlink terminal in every SkyTel network city. The entire process takes less than one minute. SkyTel is now in the process of being linked to electronic mailbox service. This will allow messages to appear on E-Mail user computers. More than 100,000 SkyTel pagers are currently in use and forecasts are for continued high growth. Research studies indicate that there could be one million nationwide pagers in use within five years.

Mtel believes there is a need for a commercial radio service to meet the messaging and data transmission need of portable computer users. Current radio-based local area network concepts do not provide data transfer much beyond a physical building. They say their two-way nationwide wireless network ("NWN") will allow the public to interchange data in real time while traveling throughout the U.S. They also believe there is a market for messaging where an immediate acknowledgement to a message is required or desirable.

Due to the explosive growth in use of laptop and notebook computers, Mtel contends the market for a highly

portable general messaging service will reach 3.5 million terminal units within five years ...with "acknowledge-only" pager units ever higher. "The next logical step ...is E-Mail to portables in the field. Because real-time interaction is not required, E-Mail messaging to NWN user terminals will be a highly efficient means of communicating with business executives or others on travel. ..."The power of combining reliable two-way wireless digital transmission with portable computers is immense. It is a power that also is untapped because adequate spectrum has not been made available for two-way systems..."

"The benefits of NWN ...will not be limited to large institutions. ...small businesses and individual users with modems will be able to access NWN via public telephone numbers." Users with E-Mail boxes will be able to interact with the NWN system using existing gateways ...message delivery confirmations will be forwarded.

One of the benefits of the NWN system will be its ability to offer the public an initial level of service on a less costly basis, satisfying some public demand while a larger two-way market develops. Mtel's says their research discloses a potential of several million "answer back" customers. Users simply would reply with one of several preformatted answers ...such as "yes," "no," "I will call," "busy," "emergency," and the like.

The National Wireless Network will function as a "...high-speed, high-throughput simulcast network" operating as a simplex system at speeds of up to 24,000 bits-per-second on a single 50 kHz wide spectrum "highway." The forward and reverse transmissions will share the same channel using special techniques to accommodate time fluctuations in send/receive channel use. Using a 3,000 character message as a model, Mtel predicts that a 18,000 bps NWN system will accommodate over 600,000 users ...a 24,000 bps NWN system, over 800,000 users.

"Portable NWN terminals will be small and likely will have relatively inefficient antennas. NWN terminals also will need to operate from within buildings as well as inside vehicles. Simulcasting, with its ability to use controlled multipath, will place a more usable signal more often at a terminal's antenna."

The FCC acknowledged receipt of the *Petition for Rulemaking* on November 12. Mtel also filed two other requests. They applied for a "pioneer's preference" in the awarding of a NWN license and an experimental license to operate and finalize its NWN system concept.

to: W5YI-VEC; P.O. Box #565101; Dallas, Texas 75356-5101. A certificate will be sent to you in about two weeks.

ARRL SEEKS MORE 1.25m NOVICE PRIVILEGES

The American Radio Relay League has submitted a *Petition for Rulemaking* to the FCC seeking to expand the Novice 1.25 meter band from 222.10-223.91 MHz to 222.0-225.0 MHz.

The League said that prior to 1987, the Novice operator had no operating privileges in the VHF/UHF range. The Novice Class was "enhanced" in that year by allowing additional operating privileges in the 10 meter HF band, the VHF 1.25 meter band and the UHF 0.23 meter bands. The objective was to provide a "common meeting ground" for newcomers to meet more experienced amateur operators.

"However, the Commission noted that the allocation status of the 216-225 MHz band was not yet determined and that it would not finalize any proposal for Novice subbands relative to the 220-225 MHz band until the overall allocation issue was resolved."

The ARRL said comments on the Novice Enhancement proceeding generally favored the availability of the entire band for Novice operation using all emission modes. "The only restriction urged by the League and others was that Novices should not be allowed to be control operators or trustees of repeaters, though they should be allowed to transmit (i.e. have their signals retransmitted) through a repeater." The FCC agreed to this condition - along with beacon and auxiliary operation exclusions - when they issued the Order authorizing Novice Enhancement.

"In addition to that restriction, however, the *Report and Order* limited the frequency privileges of Novice Class licensees in the 1.25 meter band to those which, at the time, corresponded to those specified in the ARRL band plan for repeater input frequencies: 222.10-223.91 MHz. This was ostensibly to focus Novice operation on FM repeater operation in the 220 MHz band. It also avoided the 220-222 MHz segment, which was under consideration in Docket 87-14 for reallocation to the land mobile radio services."

The Commission acknowledged in the Novice Enhancement proceeding that: "Our reason for selecting this band is to provide Novice operators access to repeater communications by permitting them to operate on repeater input frequencies. Where voluntary band plans identify repeater output frequencies inside the subband 222.10-223.910 MHz, this circumstance is not to be construed as authority for repeater operation ...by Novice class licensees."

Amateur operation in the 220-222 MHz subband ceased August 27, 1991. The League said "...a complete reworking of the 222-225 MHz band plan is required and is underway within the Amateur community. The League's national band plans have traditionally been the standard throughout the country ...subject to local variation. These local variations, and the significant changes brought about in Docket 87-14 will render the frequency limitations now contained in §97.301(f) with respect to Novice use of the 1.25 meter band obsolete, and will unnecessarily, and with no justification, restrict Novice amateur operation."

The ARRL reminded the FCC they did not support the frequency limitation when it was imposed "...as the voluntary band plans in the Amateur Service are dynamic, while regulatory limitations on frequency are not. Now, with the changes in the band plan brought on by the compression of all 220-225 MHz amateur operation into the 222-225 MHz band, reconfiguration of the band plans, both locally and nationally, are required."

"The exposure of Novices to all facets of amateur operation in that band will enable them to become proficient in a wider variety of amateur operation, including weak-signal, CW and SSB terrestrial operation, which has become routine at 220 MHz."

"The frequency limitation contained in the current rules for Novice licensees was intended to insure that Novices did not have privileges to transmit on the output frequency of repeaters (as they do not have the privilege of being control operators of repeaters, the theory was that they would have no need to operate on channels dedicated, by national band plan, to repeater outputs.)"

The League felt that it is sometimes useful for Novices to have the ability to utilize repeater output frequencies as well as the inputs ...such as when a repeater is not operational, to attract attention in an emergency situation or when they are out of repeater range.

"Principally, however, the benefit of the relief of restrictions proposed herein is that Novices should be exposed to routine types of amateur operation in the 1.25 meter band other than FM repeater operation. Such would encourage the self-training and development of the Novice licensee."

The *Petition for Rulemaking* was submitted by the League's General Counsel, **Chris Imlay, N3AKD** on November 12. The commission assigned RM-7868 to the proposal and has set a 30-day comment period.