

W5YI

Nation's Oldest Ham Radio Newsletter REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

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FCC PREEMPTS "SCANNER LAWS" FOR HAMS

The Federal Communications Commission has ruled that states and municipalities may not enact ordinances forbidding amateur radio equipment simply because it receives frequencies normally reserved for police use.

On November 14, 1989, the American Radio Relay League filed a *Motion for a Declaratory Ruling Concerning the Possession of Radio Receivers Capable of Reception of Police or Other Public Safety Communications*. The laws referenced by ARRL prohibit the possession of such receivers if they are capable of the reception of communications on certain frequencies other than amateur service frequencies. On March 15, 1990, the FCC issued a *Public Notice* that asked for additional comment on the matter.

The League's motion discusses state statutes and local ordinances commonly known as "scanner laws," the violation of which may be a criminal misdemeanor with the possibility of equipment confiscation. Both New Jersey and Kentucky had laws on the books which prohibit the ownership of a mobile short-wave radio capable of receiving frequencies assigned for police use.

The ARRL also contended that many local ordinances throughout the United States similarly ban these radios without a locally-issued permit. "Scanner laws can render amateur radio licensees travelling interstate by automobile vulnerable to arrest and to the seizure of their radio equipment by state or local police."

Since the ARRL motion was filed with the Commission, both states changed their laws. New Jersey repealed its statute and substituted a new, narrowly tailored scanner law that only applies in the criminal context. Kentucky amended its statute by adding an exemption applying to amateur radio operators. As a result, there no longer appears to be any state scanner law with a detrimental effect on the legitimate operations of amateur radio service licensees.

The FCC said, "Nonetheless, the preemption issue raised by the ARRL motion remains timely because it appears that some local scanning ordinances remain in effect without safeguards to protect the legitimate use of such radios by our licensees."

The ARRL Motion

The League made two arguments in support of preemption. First it said that the receiver sections of the majority of commercially available amateur station transceivers have the capability to be tuned slightly past the edges of the amateur service bands "...to insure proper operation of the transceiver throughout the entire amateur band in question."

The second point that ARRL made was the broader issue of whether state and local authorities should be permitted, via scanner laws, to prohibit the capability of radio reception by ham

operators on public safety and special emergency frequencies that are located well outside the amateur service bands.

The League maintains that amateur operators have special needs for broadscale "out-of-band" reception, and that the marketplace has long recognized these needs by offering accommodating transceivers. All commercially manufactured ham HF transceivers and most VHF/UHF transceivers have non-amateur service frequency reception capability well beyond the insignificant. That is, they can receive across a broad spectrum of frequencies, including those of the police and other public safety and special emergency services..

The League believes "This additional capability permits amateur operators to participate in a variety of safety activities, some in conjunction with the military or the National Weather Service. In both cases, reception on non-amateur frequencies is necessary. Such activities - some of which require the mobile use of the amateur stations - benefit the public, especially in times of emergency.

The majority of ham operators offer their services during emergencies. "The widespread enforcement of scanner laws would render illegal the possession of virtually all modern amateur mobile equipment," ARRL said. "As a result of scanner laws, several dozen instances of radio seizure and criminal arrest have been suffered by licensed amateurs." The League asked that the FCC issue a preemptive ruling that would permit ham operators to install in vehicles transceivers that are capable of this out-of-band reception.

Comments received by FCC

The FCC's 1991 *Inquiry* requested information concerning the technical and financial feasibility of modifying existing amateur service mobile transceivers to render them incapable of receiving police or other public safety channels.

The Commission also asked for information concerning the current and future marketplace availability of mobile equipment meeting the restrictions of the laws and whether there is value in having an available pool of wide-band, mobile amateur equipment in the United States to meet emergency needs.

The FCC received 115 comments and reply comments - mostly from individual amateurs who support preemption. One commenter, the Michigan Department of State Police, states that although it cooperates with the amateur service during emergencies, it is concerned about isolated incidents of apparently unlawful actions taken by amateur operators upon receipt of public safety communications outside of the

amateur radio band. It concluded that "...there can be no beneficial need for amateur radio equipment to tune in public safety channels."

Only a few of the comments addressed the technical and marketplace questions. Amateur operators believe existing wide-band transceivers cannot be modified to meet the restrictions of the scanner laws without substantial expense and that this situation will continue as new equipment becomes available. Despite a specific request in the *Inquiry*, no manufacturer chose to respond to these issues.

The National Communications System (NCS) of the Department of Defense said in its comments that "...the federal government utilizes amateur operators in a number of programs requiring mobile, wide-band transceivers."

Discussion of the issues

The FCC said there were three ways state and local laws may be preempted. First, Congress may expressly preempt the state or local law. Second, Congress may, through legislation, clearly indicate its intent to occupy the field of regulation, leaving no room for the States to supplement. "Last, and most important for this discussion, even where Congress has not completely displaced state regulation in a specific area, state law may be nullified to the extent that it actually conflicts with federal law. Such a conflict arises when compliance with both federal and state regulations is a physical impossibility, ...or when state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."

The Commission added, "...federal regulations have no less preemptive effect than federal statutes." The amateur service is regulated by Part 97 of the Commission Rules and "We recognize the Amateur Radio Service as a voluntary, non-commercial communication service, particularly with respect to providing emergency communications. Moreover, the Amateur Service provides a reservoir of trained operators, technicians and electronic experts who can be called on in times of national or local emergencies."

The FCC said the strong federal interest in the preservation and advancement of the amateur service is also demonstrated by Congress' recent recognition of the goals of the amateur service in a 'Sense of Congress' provision in which Congress strongly encouraged and supported the amateur Service.

"Sense of Congress"

The Federal Communications Commission

Authorization Act of 1988 contains the following statement:

"(a) The Congress finds that:

(3) among the basic purposes of the Amateur Radio Service is the provision of voluntary non-commercial radio service, particularly emergency communications, and;

(4) volunteer amateur radio emergency communications services have consistently and reliably been provided before, during, and after floods, tornadoes, forest fires, earthquakes, blizzards, train wrecks, chemical spills, and other disasters.

(b) It is the sense of congress that:

(1) it strongly encourages and supports the Amateur Radio Service and its emergency communications efforts; and;

(2) Government agencies shall take into account the valuable contributions made by amateur radio operators when considering actions affecting the Amateur Radio Service.

The Commission said "We believe that the strong federal interest in supporting the emergency services provided by amateurs cannot be fully accomplished unless amateur operators are free to own and operate their stations to the fullest extent permitted by their licenses and are not unreasonably hampered in their ability to transport their radio transmitting stations across state and local boundaries for purposes of transmitting and receiving on authorized frequencies. Indeed, as a result of advances in technology making smaller, lighter weight radios commercially available, the Commission has expressly amended its rules to facilitate and encourage unrestricted mobile amateur operations. ...the Commission's Rules do not in any way prohibit an amateur service transceiver from having out-of-band reception capability."

FCC Conclusion

"...we conclude that certain state and local laws conflict with the Commission's regulatory scheme designed to promote a strong amateur radio service. Scanner laws that prohibit the use of transceivers that transmit and receive amateur frequencies because they also receive public safety, special emergency or other radio service frequencies frustrate most legitimate amateur service mobile operations through the threat of penalties such as fines and the confiscation of equipment.

"As noted by ARRL, virtually all modern amateur service equipment in use today can receive transmissions on the public safety and special emergency frequencies at issue, and the majority of amateur stations are operated in a mobile fashion. Consequently, the mobile operations of the vast majority of amateurs are affected by such laws.

"In addition, the record statements of amateurs of the costs would be substantial to modify existing transceivers are unchallenged. The scanner laws, then, essentially place the amateur operator in the position of either foregoing mobile operations by simply avoiding all use of the equipment in vehicles or other locations specified in the laws, or risking fines or equipment confiscation.

This very significant limitation on amateurs operating rights runs counter to the express policies of both Congress and the Commission to encourage and support amateur service operations, including mobile operations, and impermissively encroaches on federal authority over amateur operators. It conflicts directly with the federal interest in amateur operators being able to transmit and receive on authorized amateur service frequencies."

Scanner laws preempted!

"For these reasons, we find it necessary to preempt state and local laws that effectively preclude the possession, we find it necessary to preempt state and local laws that effectively preclude the possession in vehicles and elsewhere on amateur service transceivers by amateur operators merely on the basis that the transceivers are capable of reception on public safety, special emergency, or other radio service frequencies, the reception of which is not prohibited by federal law.

(The Communications Privacy Act of 1986 does not prohibit the reception of the unauthorized reception on frequencies of certain radio services such as cellular radio telephone.)

"We find that, under current conditions and given the types of equipment available in the market today, such laws prevent amateur operators from using their mobile stations to the full extent permitted under the Commission's Rules and thus are in clear conflict with federal objectives of facilitating and promoting the Amateur Radio Service. We recognize the state law enforcement interest present here, and we do not suggest that state regulation in this area that reasonably attempts to accommodate amateur communications is preempted. This decision does not pertain to scanner laws narrowly tailored to the use of such radios, for example, for criminal ends such as to assist

flight from law enforcement personnel.

"We will not, however, suggest the precise language that must be contained in state and local laws. We do find that state and local laws must not restrict the possession of amateur transceivers simply because they are capable of reception of public safety, special emergency or other radio service frequencies, the reception of which is not prohibited by federal law, and that a state or local permit scheme will not save from preemption an otherwise objectionable law.

"Finally, we note, as stated by APCO in comments filed previously in this proceeding, that any public safety agency that desires to protect the confidentiality of its communications can do so through the use of technology such as scrambling or encryption.

Conclusion

"We hold that state and local laws, that preclude the possession in vehicles or elsewhere of amateur radio service transceivers by amateur operators merely on the basis that the transceivers are capable of reception of public safety, special emergency, or other radio service frequencies, the reception of which is not prohibited by federal law, are inconsistent with the federal objectives of facilitating and promoting the amateur radio service and, more fundamentally, with the federal interest in amateur operators' being able to transmit and receive on authorized amateur service frequencies. We therefore hold that such state and local laws are preempted by federal law."

The FCC's ruling follows a five year effort by ARRL to obtain a definitive ruling after several highly publicized cases where Amateur Radio operators were subject to arrest and seizure of mobile amateur radio equipment by local authorities for violation of so-called "scanner laws."

ARRL Executive Vice President David Sumner, K1ZZ, predicts that the FCC ruling will be a powerful tool for Amateur Radio operators to use against ill-conceived state and local legislation.

"The preemption declaration represents an excellent job by the FCC and its staff," says Sumner. "It's also a tribute to those in the League who recognized the need, prepared the arguments, and then kept the faith throughout the lengthy administrative process."

Sumner notes that ARRL began pursuing the ruling with comments it filed on November 29, 1988 proposing the addition of a new section of the FCC's Part 97 rules. A year later, the League asked for a declaratory ruling on the Issue. The Preemption Order finally was adopted by the Commission on August 20, 1993. (*Memorandum Report and Order, PR Docket No. 91-36 released September 3, 1993*)

AMATEUR RADIO CALL SIGNS

...issued as of the first of September 1993:

Radio District	Gp."A" Extra	Gp."B" Advan.	Gp."C" Tech/Gen	Gp."D" Novice
Ø (*)	AAØOR	KGØHW	NØYJG	KBØLLM
1 (*)	AA1HG	KD1QU	N1QBM	KB1BDK
2 (*)	AA2PI	KF2QV	N2WEQ	KB2QOE
3 (*)	AA3FS	KE3JR	N3QAO	KB3AYE
4 (*)	AD4JB	KR4BL	(***)	KE4FBE
5 (*)	AB5PD	KJ5PJ	(***)	KC5CNE
6 (*)	AB6VY	KN6QI	(***)	KE6AOT
7 (*)	AA7YG	KI7QS	(***)	KB7YBV
8 (*)	AA8MD	KG8DQ	(***)	KB8PKS
9 (*)	AA9ID	KF9RF	N9URQ	KB9IUZ
N.Mariana Is.	AHØU	AHØAN	KHØCD	WHØAAX
Guam	NH2U	AH2CT	KH2HC	WH2ANH
Johnston Is.	AH3D	AH3AD	KH3AG	WH3AAG
Midway Is.		AH4AA	KH4AG	WH4AAH
Hawaii	(**)	AH6NC	WH6OQ	WH6CQV
Kure Is.			KH7AA	
Amer. Samoa	AH8H	AH8AF	KH8AX	WH8ABB
Wake W.Peale	AH9C	AH9AD	KH9AE	WH9AAI
Alaska	(**)	AL7PF	WL7MO	WL7AHU
Virgin Is.	WP2B	KP2CC	NP2GQ	WP2AHU
Puerto Rico	(**)	KP4VQ	(***)	WP4MJF

CALL SIGN WATCH:

*=All 2-by-1 "W" prefixed call signs have been assigned in all radio districts. Group "A" 2-by-2 format call signs from the AA-AK block are next assigned to Extra Class amateurs when 2-by 1's are all allocated.

**=All Group A (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico. Group "B" (2-by-2) format call signs are assigned to Extra Class when Group "A" are depleted.

***=Group "C" (1-by-3) call signs have now run out in the 4th, 5th, 6th, 7th, 8th and Puerto Rico call districts. According to the rules (adopted by the Commission Feb. 8, 1978, Docket No. 21135), Technician/-General class amateurs are next assigned Group "D" (2-by-3 format) call signs when all Group "C" have been assigned.

Upgrading Novices holding a 2-by-3 format call sign in the 4th, 5th, 6th, 7th, 8th and Puerto Rico call areas will no longer be able to request a Group "C" call and will be automatically assigned another more recent 2-by-3 format call sign if they do! The FCC will not be going back and reassigning unused "K" and "W" 1-by-3 format call signs.

[Source: FCC, Gettysburg, Pennsylvania]

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September 15, 1993

JULY AMATEUR LICENSING STATISTICS

<u>July</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
New Amateurs:				
New Novices	1665	1662	1024	709
New Tech's	269	2932	2752	1397
Total New:	2003	4676	3843	2125

Upgrading:

Novices	2164	1670	836	254
Technicians	636	*764	*596	*286
Generals	460	463	409	189
Advanced	<u>311</u>	<u>321</u>	<u>309</u>	<u>104</u>
Total:	3511	3218	2150	833

Renewals:

Total Renew:	73	107	65	158
Novices	10	12	9	12

Purged:

Total Dropped:	1673	21	10	0
Novices	764	21	3	0

Census:

Indiv. Oper.	490402	525574	575113	616576
Change/Year	+29216	+35172	+49539	+41463

Individual Operators by Class: (and % of total)

<u>Extra</u>	<u>Advan.</u>	<u>General</u>	<u>Technic.</u>	<u>Novice</u>	<u>Total:</u>
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July 1990

52440	104041	118846	123943	91232	490402
10.7%	21.2%	24.2%	25.3%	18.6%	100.0%

July 1991

55783	106732	121505	144593	96961	525574
10.6%	20.3%	23.1%	27.5%	18.4%	100.0%

July 1992

60081	109215	124359	182696	98762	575113
10.4%	19.0%	21.6%	31.8%	17.2%	100.0%

July 1993

63655	111642	126535	213817	101177	616576
10.3%	18.1%	20.5%	34.7%	16.4%	100.0%

Club/

	<u>(1990)</u>	<u>(1991)</u>	<u>(1992)</u>	<u>(1993)</u>
RACES & Military:	2444	2431	2431	2431

Total Active: 492946 528005 577544 619257

% Increase +6.3% +7.1% +9.4% +7.2%

(* = Does not include Technicians upgrading to Tech Plus)

AMATEURS BY CALL SIGN GROUP:

<u>Group</u>	<u>Extra</u>	<u>Advan.</u>	<u>General</u>	<u>Technic.</u>	<u>Novice</u>	<u>Total</u>
A	35963	682	249	7	0	36901
B	4163	29496	54	6	1	33720
C	14623	44383	67614	94421	47	221088
D	8661	36964	58511	119322	101127	32585
Other	245	117	107	61	2	532

Total 63655 111642 126535 213817 101177 616826

[Group "A"=2X1 & 2X2; "B"=2X2; "C"=1X3 "D"=2X3 format.]

[Source: FCC Licensing Facility, Gettysburg, PA]

• The number of amateurs holding a Novice Class operator license now exceeds 100,000! The fastest growing ham class by far is, of course, the Technician! One amateur in three now is a Tech!

This month's licensing statistics are very misleading. It looks like the number of new amateurs is only half what it has been running, but that is not the case. The problem is the FCC has fallen behind in processing amateur radio applications into licenses.

The FCC in Gettysburg advised us that up until recently it had been taking 8 to 10 weeks to issue a ham ticket from the date it is received in Gettysburg. To that you have to add another 2 or 3 weeks for the application to wind its way through the VEC System. That adds up to about a 3 month wait for a new ham..

FCC's Larry Weikert told us that their Gettysburg licensing facility entered Form 610 applications received between July 6 and 9 on August 31st. To that you have to add another couple of weeks for the ticket to actually get printed and mailed. That meant the backlog was 10 weeks at the end of August. Weikert said a "push" was then made to clear up the backlog. On September 9th, applications received between August 18 and 26 were handled. "Seven weeks of applications were basically handled in a two week period." The accumulation is now down to 3 weeks before Gettysburg can get to the application.

To this 3 weeks you have to add another month to cover the time it takes the FCC to receive the application from the VE and VECs - and time for the license to be issued after it is entered into the Gettysburg terminals. (Before a ham ticket can be issued, the data must be filtered through the FCC's Washington, DC database.) The bottom line is that the time between examination and license receipt now stands at about 8 weeks instead of 12.

Since I had Weikert on the phone, I asked him how the new Gettysburg computer system was coming that eventually will be handling all amateur service functions. Larry said that the implementation date was running behind and that the new operator license renewal procedure probably would not be ready to go by year end when renewals will be starting up again.

The first ten year term ham tickets issued in January 1984 will be coming up for renewal. The FCC had hoped to be able to send out a renewal notice that, when returned to the FCC, renewed a ham license without the need to submit a FCC Form 610. It appears that amateurs will have to keep track of their own expiration date, since the reminder/renewal procedure will not be ready for some time yet. About 4,000 amateurs a month will begin renewing their license at year end - this is after 5 years of no renewals due to the changeover from a 5 to a 10 year term.

• The FCC has affirmed a \$5,600 *Notice of Apparent Liability* (an NAL is an administrative fine) against **Amateur Radio Supply of Seattle, Washington.**

On December 6, 1991, Amateur Radio Supply sold an amateur radio transceiver and offered to modify the radio so that it would transmit and receive in the Private Land Mobile and Marine Radio Services. An equipment authorization had not been granted for this transmitter as modified. On July 31, 1992, the Seattle FCC Field Office issued Amateur Radio Supply an NAL for marketing computers that had not been authorized by the FCC.

Amateur Radio Supply responded to the NAL and upon review by the Commission, a *Notice of Forfeiture* in the amount of \$5,600 was issued. Amateur Radio Supply then filed a *Petition for Reconsideration.*

Amateur Radio Supply stated several reasons why it should not be subject to a fine. The firm said that at the time of the infraction, they were training a new counter salesperson and that it was possible he make a mistake and implied something he was not authorized to say. Amateur Radio Supply said they have been in business since 1955 with a clean record of service to the amateur radio community and they asked that this be taken into consideration.

The FCC said "We are unpersuaded by the arguments presented. As noted in the *Forfeiture Order*, petitioners clean record of service was considered and used as a basis for mitigating the amount of the forfeiture. Further, with respect to Petitioner's argument that its employee was not authorized to make the modifications at issue in this case, it is a well established principle of law that an employer is liable for the actions of its employees."

"We have reviewed the profit and loss statement submitted by Petitioner and cannot conclude from this information that the Petitioner is unable to pay the amount of \$5,600. For the reasons stated above, we affirm the finding of liability for monetary forfeiture in the amount of \$5,600. Petitioner has failed to raise any reasons requiring a reduction of the forfeiture amount. No further adjustments appear warranted."

Amateur Radio Supply was ordered to pay the \$5,600 fine to the FCC in Chicago by mid-October.

• **Edwin R. Dahl, K17FB** of Spokane, Washington, has petitioned the FCC to **eliminate the 20 word-per-minute telegraphy examination** Element 1(C). He believes the 5 and 13 WPM Element 1(A) and 1(B) "...should be a continued requirement in order to retain not only the heritage of amateur radio, but as an application in the performance of volunteer duties during disasters or emergencies."

To support his petition, Dahl attached a newspaper article which appeared in the August 30th Spokane, Wash., "*Spokesman-Review*" entitled: "Dots, dashes die away as technology takes over." A subtitle maintains "Morse code has become a quill pen in a world of modems and megabytes. Probably not even Morse himself would flash out an SOS to save the code." The newspaper story tells how the Coast Guard, railroads, Boy Scouts and branches of the military no longer depend on the language of dots and dashes. Here is a quote from the article:

"The Coast Guard is phasing out teaching Morse code to radio personnel this month and will begin removing Morse equipment from its ships, said a spokesman at the Guard's Washington, D.C. headquarters. The Navy stopped teaching Morse code on surface ships in 1988 and will likely phase out use of the code on submarines, a Navy spokesman at the Pentagon said. Morse code was once the railroad lexicon. But the last known use of it was on wires between Milwaukee and the Twin Cities in the mid-1980's. The use ended when the last employees who knew Morse code retired, said **Bill Dunbar (AD9E)**, the Normal, Illinois, man who is president of the Morse Telegraph club. Several years ago, the Boy Scouts stopped requiring young men to learn Morse code to earn First Class rank and Morse code is no longer a necessary part of its radio merit badge."

• **Kenneth A. Piletic, W9ZMR**, of Streamwood, Illinois, has filed a petition with the Commission **asking that the "blanket interpretation of 'teacher' be reconsidered."** He says it is wise to separate the Instructors from the Examiners in order to maintain integrity in Amateur Radio testing. But he questions the policy that "...a person who teaches Morse code to Joe cannot

examine Mary for theory on the grounds of conflict of interest."

Piletic believes that "Instructors in organized theory classes should not act as examiners for the same students they taught, but they should be allowed to act as a VE to other people who were not in the class. Thus a person who 'teaches' Joe in a class or tutorship, cannot examine Joe for the subject taught; however that person could still examine Mary (who was not in the class.) W9ZMR also requests that 'teachers' of CW classes, who are really monitors of code practice sessions, be allowed to act as VE to anyone, for both theory and code."

[Editor's note: Unless we have missed something, we are not aware of any rule which precludes amateur radio instructors from being examiners. The conflict of interest rules are based on the distribution of publications and really do not address instructors and examiners.

Volunteer examiners may not distribute Amateur Radio operator license preparation publications (written material) to anyone - including students. See §97.515(b). This means that Amateur Radio instructors who will not examine their students may distribute (give away or sell with or without profit) license preparation publications to their students. Amateur Radio instructors who distribute (pass out - even without cost) license preparation publications to student(s) are ineligible to be Volunteer Examiners (i.e. administer Amateur Radio operator license examinations.) Amateur Radio instructors who wish to examine their student(s) must either (a) not distribute license preparation materials to them or (b) have someone else (other than Instructors/examiners) pass out/distribute study material.

Granted, this is all very confusing, and we do not necessarily agree with these rules, but this is what the FCC has told us.]

• **Jim Kelly, KK3K**, president of the Lambda Amateur Radio Club, (whose members are primarily gay) issued a **press release responding to the September 1993 editorial in 73 magazine by Wayne Green, W2NSD/1.**

Kelly said "Wayne Green's most recent published reference to me (and by extension, to all LARC members) as

'scum' for having filed LARC's discrimination complaint against the ARRL is indicative of the depths to which this unprincipled and seemingly unbalanced individual will sink to gratify his ego."

"The discrimination complaint which I filed in Connecticut alleging discrimination based on sexual orientation on the part of the American Radio Relay League was filed as a last resort and only after seven years of ailed attempts to convince League officials to allow LARC to run a simple membership ad in the League publication QST."

"While I regret that legal action was necessary to end the discriminatory practices directed at LARC by the League, both LARC's attorneys and Connecticut State authorities have thus far indicated that our course of action is both proper and appropriate."

"It is clear that Green is incapable of distinguishing between just and proper legal activities and those that are frivolous. In effect, he cannot distinguish between right and wrong when it comes to lawyers. This current round of name calling by Green is symptomatic of the irrational manner in which he behaves when it comes to legal matters. Clearly, his behavior is abnormal."

"I will not engage such an irrational individual in a series of attacks and counterattacks or in senseless name calling. His behavior speaks for itself. Green is to be pitied."

"Meanwhile, LARC's complaint remains pending before the Connecticut Commission on Human Rights and Opportunities. While such matters take time to resolve, I am confident that we will achieve a just outcome not withstanding the irrational ranting and raving of Wayne Green." signed: **Jim Kelly, KK3K**. (Tel. 215/978-LARC)

• We received a letter from **Lew McCoy, W1ICP**, (a previous long time employee of the ARRL and current Quarter Century Wireless Association Officer) concerning the League's opposition to QCWA becoming a "**Club and Military Recreation Call Sign Administrator**."

You will remember that in addition to the League, several organizations (The W5YI Group, Inc., included) applied to issue distinctive

amateur station call signs to ham clubs on a "no cost" basis. The ARRL challenged them all as being unqualified.

Lew writes: "The ARRL in their filing in opposition to the Quarter Century Wireless Association acting as Club Call Sign Administrator certainly have their information all wrong. They give several reasons - all wrong - in opposing QCWA. They state that QCWA does not hold a 501-C-3 Internal Revenue Service rating. This is completely in error because QCWA has held a 501-C-3 permit for over 15 years.

They also state that QCWA is organized for pleasure and recreation' but ignore the fact that QCWA has been awarding many scholarships annually, doing 'elmering' work throughout their chapters, etc. They also state that QCWA has only one employee and therefore imply that QCWA could not handle the work load involved. QCWA does have more than one employee, but for the record, is the ARRL hierarchy so ignorant or so misguided as to believe that QCWA could not hire more people if needed? Obviously they are!" Signed **Lew McCoy, W1ICP**, Vice President QCWA, Life Member, ARRL.

• The newly revised "no business" rules went into effect on September 13th. **Certain retransmissions of government provided space shuttle, propagation and weather forecast broadcasts are permitted on an occasional basis but not time signals.**

We asked FCC's, Bill Cross (the principle author of this proceeding) about this in an interview and he said "The period for reconsideration has not passed ...and someone could ask that time signals be included if they felt it important." Well some has done exactly that...

R. D. "Slim" Cummings, WA0EDA, of Pittsburg, KS has done just that! He included his original comments (dated September 21, 1992) in which he asked "While the time retransmitted will not have the precision of the original broadcast, it will be a much more accurate source of time that is available to the community in any other form. Please consider adding government time broadcasts to the permitted services."

During mid-August (and before the 30 day reconsideration period expired) Cummings wrote the FCC "I

believe that [WWV time signal retransmission] could be a very useful service to the amateur community. The ability of a VHF/UHF repeater providing a rebroadcast of WWV, upon demand, would be valuable. Many repeaters now have a time transmission of one kind or another, but WWV time could provide synchronization of events at remote points that would be much more difficult if not impossible by usual means. Please consider this possibility as I believe it could prove useful, and like other retransmission of government broadcasts, it should not cause damage to the amateur service."

• **Have you seen thirteen year old WZ1W?** A young radio amateur from Gardner, MA is missing. **Nathan A. Taylor** was last seen on August 27th. It is believed that Nathan has been coerced into traveling to the Dallas/Houston, Texas area by a man with a known criminal record.

Nathan is a very bright young man - having attained his Amateur Extra Class ticket at age 11. According to his mother (who we spoke to last week) he does not like school. And he may not be travelling with a ham radio since his primary hobby now is computers.

Nathan may be using the name of Reggie Johnson or Jeremy Newman. (A bus ticket to Tennessee was bought under that name.) His personality is best described as hyperactive, moody and often vulgar. Nathan is 5 feet 5 inches tall, 103 pounds, blue eyes, uses glasses, light brown/blond hair and thin build.

It is believed that Nathan is in an extremely dangerous situation and anyone having information regarding the whereabouts of Nathan is asked to contact Detective Bill Grasmuck of the City of Gardner Police Department at (508) 632-5600 or Phyllis and Milton Taylor at (508) 630-2896. Do not attempt to intercept Nathan.

The first information on this situation was posted Sept. 6 by Paul Topolski, N1IPG on packet radio under "ABDUCT @ ALLUS".

• We understand that country singer **Patty Loveless has now become a ham operator** with the help of her husband, **Emory Gordy, Jr., W4WRO**. At least so says a magazine

article in the September issue of **Country Music City News**. We tried to confirm her call sign with the FCC in Gettysburg, PA but none has been issued to a Patty Loveless - nor to a woman with the last name of Gordy in Dallas, Georgia. We even tried phoning Emory/W4WRO and found he has an unlisted telephone.

The magazine article said Loveless communicated with her husband for several weeks by Morse code during her vocal cord surgery recuperation.

- We finally received the Question Pools from the FCC for the newly privatized **Marine Radio Operator Permit (MROP) and the General Radiotelephone Operator License (GROL.)** All questions were placed in the public domain by the FCC on Sept. 2nd. We are now in the process of printing these pools. (Cost is \$10.00 for Element 1, Element 3 and the new Part 13 which covers privatized Commercial Radio Operator examinations.) By the way, we understand that ITS (*International Transcription Service* is the FCC's contract information provider) is charging the public \$40.00 for the same thing!

The MROP requires answering 18 of 24 question from Element 1; the GROL requires Element 1 - plus 57 correct out of 76 Element 3 questions. There are 170 questions in Element 1 (Radio Law) and 725 questions in Element 3 (Electronic Fundamentals and Techniques.)

There are eight subelements in Element 3. As in the case of Amateur Radio Operator testing, a specified number of questions must be selected from each subelement to construct an Element 3 examination:

Subelement:	Questions	& Exam
3A Operating Procedures	40	3
3B Radio Wave Propagation	22	3
3C Radio Practice	97	5
3D Electrical Principles	115	16
3E Circuit Components	75	13
3F Practical Circuits	139	22
3G Signals and Emissions	96	9
3H Antennas and Feed Lines	141	5
Total Questions Element 3	725	76

Our **National Radio Examiners** (commercial radio testing) division has already completed the **Commercial Examiners Instruction Manual** and we should be ready to get privatized Commercial Radio Operator examinations

underway within two weeks.

We have identified nearly 250 test sites throughout the United States and will shortly be stocking them with examination materials. Our Commercial Radio Testing Organization consists of 7 regions, each covering 6 to 8 States. Each state has an average of 5 test locations concentrated primarily in high density population areas.

The first Commercial Radio Operator examination is scheduled for Orange County, California on Sept. 25th. At this time, only the MROP and GROL will be administered.

We have been told by the FCC that the Element 5 and 6 Radiotelegraph pools should be ready for release in November. That means we should be testing for the 3rd, 2nd and 1st Class Commercial Radiotelegraph Operator Certificates during December. (Amateur Extra Class licensees get code credit for the Second Class Radiotelegraph without examination.)

Most of our test sites are headed up by examiners who not only hold Amateur Extra Class operator licenses - but Commercial Radio Operator licenses as well. While Amateur and Commercial testing may not be mixed, VE teams may conduct Commercial before or after an Amateur test session. The FCC requires that the two programs be kept separate.

We still have many test locations still available. Let us know if you wish to establish a **COLE (Commercial Operator License Examination) Test Center**. (\$15.00 of the \$35.00 exam fee remains with the Test Center.)

- **The FCC is fining companies left and right for marketing radiofrequency devices without certification** from the Commission. Most seem to be personal computer companies, but five "pet containment systems" (invisible fences) also got socked \$7,000 each. Several individuals and maritime firms got \$2,000 to \$8,000 fines for operating unlicensed radio stations or on unauthorized frequencies.

These fines are pocket change compared to those accumulated by potty-mouth Howard Stern. He is now up to \$1.2 million - still unpaid. His Howard Stern Show earnings are second in the broadcast industry - estimated at \$7 million a year - slightly ahead of Rush Limbaugh. The leader?

Paul Harvey at \$10. million!

Make no mistake about it. Stern is big business! And apparently advertisers (such as Coors, Budweiser, Canon, TDK, Brother Electronics and others) are happy with him because of the large audiences (primarily men 18-34) he delivers. It costs a radio station \$300,000 per year and up to carry the Stern rantings. To make money, each must sell a million dollars in advertising!

- **Amateur Communications magazine - both the English and Spanish versions - have ceased publication** after four years. The July 1993 issue was their last. Executive Director **Rita Vianney, KC4MJG**, said the reason was a general lack of advertising support.

They are offering to cover outstanding subscription balances with their other Spanish language publications, *Radioantennas*, *Packet Radio* and *Yaesu Modifications* - or their **All in Communications** magazine which is published both in Spanish and English. (Communications Publishing Group, 8250 NOW 27 St., Suite 301, Miami, FL 33122. 305/594-7735.)

- AMSAT-NA has announced that the **2-meter downlink for the Phase 3D satellite will be designed and built by Mike Dorsett, G6GEJ** as part of the international Phase 3D project team.

His proposed design was described at the AMSAT-UK Colloquium held at the University of Surrey (England) last month. Together with the 70-cm uplink receiver already planned, this means there will be a Mode "UV" (formerly known as Mode B) on the new satellite. Mike Dorsett, G6GEJ (who is doing this work on a volunteer basis) is a well known designer of high performance VHF/UHF equipment.

- **VE teams take note!** Many medical doctors who sign telegraphy exemption statements on their patients' FCC Form 610 applications are being written to by the FCC in Gettysburg concerning the alleged disability and potential exam accommodations.

The telegraphy exemption request is routinely denied if the doctor fails to respond within 30 days to three questions from the FCC. Many do not! Although the FCC notifies the applicant, the Form 610 application is not returned or acted upon by the FCC.

WSYI REPORT

Nation's Oldest Ham Radio Newsletter

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September 15, 1993

TECHNOLOGY UPDATE

■ Cellular telephones have been taking a beating in the British press lately, being blamed for bad calls to curtain calls. Tennis officials at Wimbledon shut off the electronic court sensors that normally detect out-of-bounds shots, due to RFI. In London, the opening of Andrew Lloyd Webber's new musical, "Sunset Boulevard," was delayed for 13 days until technicians could find out why the hydraulic pumps on the scenery were turning on by themselves — cellular telephones were to blame again. — Telephony, July 12, 1993

■ Ask a group of helicopter pilots what their greatest fears are and one of the answers will probably be "power lines." Unlike broadcast towers and masts, power lines are not as strictly regulated in terms of illumination. McDonnell Douglas hopes to rectify that with their new power line sensor, which warns pilots when they fly too close. The sensor detects the magnetic fields induced by the high-voltage wires; if the lines appear to be in the path of the helicopter, the sensor alerts the pilot. Power lines up to 3.5 miles away can be sensed.

Chopper pilots are always advised to steer clear of radio towers, and not just because of their height. There have been cases in which the powerful RF signals they emit got into the electronic guidance systems of some helicopters, causing them to crash because the pilots couldn't regain control. — Aircraft Engineering, June 1993

■ The world's smallest PC-compatible motherboard is now available from Epson. Produced by SMOS Systems, the 386 motherboard includes VGA graphics, ROM and RAM on board — all on a space the size of a credit card! All external devices, such as power supply, keyboard, monitor and disk drives, are added through several small sockets.

■ Prerecorded videotape dealers have been screaming for years over their loss of money because renters borrow a tape, copy it, then return it without ever renting it again. Various techniques to prevent copying have tried and failed over the last few years. But a British company, Shapecourt Ltd., is trying out a new technique that involves

planting a digital controller inside each videotape. The VPS System, as it is named, keeps the video signal scrambled until someone wants to rent the tape. At that point, the clerk commands the inside controller to descramble the video signal for however long the customer wants to pay: one day, two days, or three. If the tape isn't back by then, the controller scrambles the picture again! — Electronics, 23 August 1993

■ "Let us help you out or in," says a sign in a locksmith's store window. The same can be said for radio-frequency interference — RFI. Keeping it from leaving the inside of your radio is just as important to your community as it is keeping it from reaching your receiver from the outside. A new type of interference filter in the form of a plastic-like sheet is now being used by many engineering firms to fight RFI. Companies that manufacture this material claim up to 100 dB of shielding, at frequencies as high as 18 GHz! Soft and pliable, the shielding filter can be cut with scissors, positioned very exactly, and used just about anywhere. Perfect for hand-held equipment.

■ Thanks to digital hardware and software, telephone users serviced by Illinois Bell in Chicago can now subscribe to a deluxe form of Caller ID. This souped-up version not only displays the number of the telephone calling you, but also shows you the name of the caller. If it's a business calling, the unit will say so. The information provided shows the name of the owner of the phone, not the person actually using it. (The technology isn't quite that far yet!) If callers don't want their names shown in this manner, they can of course block it from view... not by paying a fee, but by dialing a special prefix before dialing the phone number. — Telephony, July 12, 1993

■ Instead of sending the kids into the next room when the TV show gets too steamy or too violent, viewers may soon be able to use a device and service that automatically blurs portions of the screen deemed too mature for younger audiences. VideoFreedom, of San Diego, says that the device works by use of data transmitted during the vertical blanking interval (VBI), which tells the add-on device exactly which

portion of the picture to blur. VBI is also home to closed captioning and Teletext. In addition to pictures, bad language can also be edited out on the fly. A remote control comes with the device, so viewers can disable the unit if they so desire. VideoFreedom's unit works by means of a microprocessor based video and audio editing system, enclosed in a box very much like a cable converter. But instead of receiving editing commands from a control panel, it is told what to do by the incoming video signal. — Broadcasting & Cable, August 23, 1993

■ About 2.5 million Americans suffering from diabetes must prick their fingers for blood sample testing up to five times a day. Doing so on a regular basis can get old after a while, and some patients either can't or won't do it as much as needed.

Sandia National Laboratories has come up with new approach. Their device uses ordinary infra-red light to literally "see" into a finger. An IR-emitting diode sends a beam of invisible light into the digit, and a sensor on the other side reacts to what it sees. Blood vessels and tissues either absorb or transfer the light, according to the frequency spectrum.

While this system is still experimental, it promises to provide a safe, painless, and quick way of monitoring several other blood levels, including alcohol. A sobriety test could be done using this method, and would be much more difficult to beat. — Aviation Week & Space Technology, August 23, 1993

■ CD-ROM equipment has become so popular that manufacturers can't keep up with the demand. Experts expect the market to nearly double this year! Apple Computer, Inc., will begin installing CD-ROM drives into all their Macintosh computers later this year. Over six million CD-ROM drives are in use.

CD-ROM is popular because it holds tremendous amounts of data and can retrieve it quickly. Although it is strictly read-only memory (which means it can't record anything), dozens of companies use it to store thousands of pictures and songs, volumes of encyclopedias, atlases, and of course even Amateur Radio call signs. Video game manufacturers such as Sega and Nintendo are already using this technology for their home systems.

ARRL ON MESSAGE FORWARDING SYSTEMS

The American Radio Relay League has filed Reply Comments "Concerning Message Forwarding Systems in the Amateur Radio Service." In PR Docket 93-85 the FCC proposed to hold the originating station licensee and the control operator of the first forwarding station accountable for communications transmitted within a message forwarding system.

The NPRM was issued in response to several petitions concerned about the requirement that all packet radio stations including those simply digipeating (automatically relaying) a communication are responsible for the content of messages being transmitted through their station. The contention was that individual message review through every forwarder was virtually impossible and would slow the amateur packet radio network down to a crawl.

A "message forwarding system" is a group of amateur stations participating in a voluntary, cooperative, interactive arrangements where messages and other communications from the control operator of an originating station are transmitted to one or more destination stations via forwarding stations which may or may not be automatically controlled. The "first forwarding station" is the station that receives a communication directly from the originating station and inputs it into the system.

The FCC said "The first forwarding station could establish guidelines for messages that the station will accept for introduction into the message forwarding system. For example, the control operator of the first forwarding station could personally review each message prior to allowing its introduction into the system or could accept the risk of retransmitting a message from an originating station whose licensee the control operator deems trustworthy without checking it."

The Commission said that under this approach, message systems could still operate at high speeds but would have the safeguards necessary to prevent misuse. Control operators of forwarding stations would still have to discontinue retransmitting messages they believe to violate the rules "once they become aware of their presence" but they no longer would have to screen each message.

Most commenters agreed that the originator of a content-violative message and the first store-forward station in a data message network, are properly accountable for the improper message. Some felt that only the originator should be held responsible. The ARRL said, "Such a position, however, ignores certain realities of both the nature of data communications and the enforcement process. It is difficult in some cases to ascertain the identity of the originator of a message, and it is not useful to allocate responsibility for rule violations in such a way as to make enforcement impossible or impractical in individual cases."

The League said it "...continues to be concerned about the proper identification in the proposed new rules of the first forwarder. The creation of an obligation on the part of the first forwarder must be accompanied by a finding that the first forwarder ...has some actual ability to exercise the control necessary to fulfill the obligation. If the first forwarder of an offending message is not a store-and-forward bulletin board system, but is ...a digipeater, the control operator of the digipeater is technically the first forwarder in the message forwarding system, but is not one with the ability to review a message for content prior to moving the message along."

ARRL ON RESPONSIBILITY OF CONTACT VE's

The League says it is opposed to the idea of holding a single "Contact VE" responsible for the integrity of a license examination session rather than the three VE's who currently certify a FCC Form 610.

Although not suggested in the petition filed by the Rules Committee of the *National Conference of Volunteer Examiner Coordinators*, ARRL also opposes any reduction in the number of examiners.

The ARRL believes "There is no evidence that the three-examiner requirement is overly burdensome or limits the availability of test sessions." The League further says it "...finds it difficult to determine what the problem is that the petition is intended to solve." In essence, the ARRL does not understand the problem.

Actually, the difficulty lies in the area of enforcement - especially with large test sessions where there are more than three examiners. It is not possible to hold each certifying VE responsible for all test functions when they may only perform a single assignment such as observing a telegraphy exam. Three VE accountability is workable only with test sessions where each of the three VE's handle all testing functions. This is rarely the case with large examination sessions. It is the CVE, however, who manages the session ...and directs the VEs.

Furthermore it is the Contact VE (or Team Liaison) who receives the testing materials from their VEC. It is questionable whether each VE should be equally responsible for the integrity of each examination session when most simply assist the CVE.

The ARRL also believes that with single Contact Volunteer Examiner accountability, the VEC is placed in the difficult position of having to vouch for the integrity of the CVE. "This is a function that is presently self-regulating, merely by virtue of the concept of joint and several liability of the three VEs. For the VEC to designate one of those three as the person with the responsibility for the session, ...requires the evaluation by the VEC of the integrity of that CVE, since there are no local checks and balances in place at the test session."