W5YI

National Volunteer Examiner Coordinator

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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★ *In This Issue* ★

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220-222 MHz BAND REMOVAL DATE SET

Last week, the FCC circulated a Public Notice notifying the Amateur community that amateur operation in the 220-222 MHz band is prohibited after August 27, 1991.

Nearly three years ago, the FCC separated the shared 220-225 MHz band into exclusive allocations. Rather than have the Fixed, Land Mobile Service and Amateur Service share the five megahertz, the Commission reapportioned 220-222 MHz to narrow band business use and 222-225 MHz exclusively to the Amateur Service.

Previously amateurs enjoyed nearly sole use since they were the only user of the spectrum. Amateur operators were placed on notice September 6, 1988, that they should provide for an orderly transition from this band to avoid abrupt termination of amateur station operations.

On March 14, 1991, the Commission approved new Land Mobile Service rules which provided for 400 five kHz-wide band widths between 220-222 MHz; paired to provide 200 narrow band business channels. Channels were set aside for local and nationwide use. A few channels were designated for government purposes only.

Due to mileage separation permitting co-channel use, thousands of stations are expected to make use of the new business bands. The Commission has only been accepting narrow band applications for about 30 days; nearly 50,000 applications have been received by the administrator; Mellon Bank in Pittsburgh. Part 90 licenses will be granted as soon as "type accepted" (FCC approved) equipment is available for land mobile operation. Many of the licenses will be granted by lottery due to the great number of applications filed.

The FCC order called for amateurs to discontinue operation in the 220-222 MHz band 90 days following the effective date of the new rules which became effective May 29th.

The May 13th FCC Notice said "Now that the effective date of these rule changes have become certain, amateur operators are hereby placed on notice that amateur stations may not transmit in the frequency band 222.000 to 222.000 MHz after 0000 hours UTC, August 28, 1991."

The Commission emphasized that requests for waiver of the rules to permit continued amateur station operation in this band will generally not be viewed favorably. "Any requests for continued amateur station operation in the 220-222 MHz frequency band, whether couched as requests for waiver, requests for special temporary authority, requests for experimental or developmental licenses or in any other form, will be strictly

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scrutinized in light of the Commission's actions in General Docket No. 87-14 and PR Docket No. 89-552. Any such request must overcome the heavy burden of demonstrating that the arguments made in support thereof are substantially different from those that have been carefully considered in both proceedings. Any such request must include acceptable justification for failing to provide for an orderly transition from the band over the past three years, notwithstanding the Commission's repeated notifications to amateur operators that failure to provide for such a transition could result in abrupt termination of operation."

In an unrelated rulemaking, the FCC has removed all references in §97.303(b) to protecting the Government radiolocation service from 1.25 MHz interference since that service is no longer a primary user of the 222-225 MHz band.

APCO SUPPORTS RECEIVER PREEMPTION
When Used by Amateur Radio Operators

George W. Murray, WB4DYQ, of Lake City, Georgia, has filed personal comments on the Commission ***"Inquiry into the Need to Preempt State and Local Laws Concerning Amateur Operator Use of Transceivers Capable of Reception Beyond the Amateur Service Frequency Allocations."*** The FCC is looking into the necessity of amateurs having radio equipment that can receive spectrum other than the ham bands ...especially police channels. *(PR Docket 91-36. **W5YI Report** 3/1/91)*

What makes the Murray submission interesting is he is a police officer ...and the immediate past president of the more than 8,000 members who belong to the *Associated Public-Safety Communications Officers, Inc.* APCO is the leading organization representing police radio.

We spoke to Murray this past weekend. He said his position is also that of APCO which were submitted previously. "I have a problem with criminals using radio to facilitate a crime, but not licensed amateur radio operators. Let's punish people for breaking the law, not just listening."

In his formal comments, Murray said he is "...offended to be told that, because I am pursuing my hobby, I am a criminal. But, only in my vehicle; I can participate in the forbidden activity at home, with impunity. As a general rule, people who listen to public safety frequencies are interested in what is occurring in their immediate area."

"I feel that ARRL is not seeking to penalize the radio amateur by causing him/her to have to modify their existing equipment, or to obtain 'restrictive' equipment. I believe the desire is to facilitate public service operations of the amateur by keeping him/her informed.

"The vast majority of law enforcement officers do not know the difference between amateur radio, public-safety radio and private radio frequencies. Their expertise ends with pushing the push-to-talk button on their assigned radio.

"Further, regulations directed at licensed radio operations should, of necessity, be uniform nationwide. Users should not be burdened with laws that change from one jurisdiction to another. If the radio operator is licensed by the Federal government, the State and local governments should have no authority to further restrict the operation.

"Should the government require more protection of their radio transmissions, I suggest they procure encrypted systems, as suggested by the *Associated Public-Safety Communications Officers* (APCO).

"Government solicits the assistance of the amateur operator during emergency and disaster situations. Then, they turn around and want to penalize the same volunteers for listening to their radio conversations. The Amateur Service is dedicated to public service. To allow the state and/or local government to restrict that capability is incomprehensible.

"I strongly urge the Commission to preempt statutes and ordinances that restrict the ownership and/or use of mobile receivers, especially as pertains to the Amateur Radio Service, unless the use of such receivers facilitates the commission of a crime." ***(Received by FCC on May 7, 1991)***

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• The ***Southern California Repeater and Remote Base Association*** has petitioned the FCC to establish a corps of ***Volunteer Coordinators ("VC's")*** whose function will be to provide coordination of the operating frequencies of stations in repeater and/or auxiliary service on the Amateur Radio Service bands at the 10 meter and shorter wavelengths.

"Adoption of the proposed Rules would provide recognition of presently existing and a foundation for future ARS frequency coordination activities." said SCRRBA, a voluntary frequency coordinator of 10m, 6m and 70cm amateur spectrum. The 34-page petition was very professionally completed; obviously by an attorney.

One of the benefits of VC's would be to control individuals or groups who declare themselves to be frequency coordinators and then self-certify their operation.

SCRRBA contends: (1.) the frequency coordination process for repeater and auxiliary stations must be explicitly recognized in the Part 97 Rules; (2.) the FCC must recognize specific individuals and groups as Volunteer Coordinators and; (3.) the FCC must not recognize and delegate authority to more than one VC for each amateur band in a specific area.

SCRRBA has proposed a new Part 97 "Subpart G" which establishes the ***Corps of VC's,*** provides them with the authority necessary to conduct frequency coordination of repeater and auxiliary stations, and establishes minimum duties, qualifications and criteria for evaluating performance. Reimbursement to VC's for actual expenses incurred in providing frequency coordination would be permitted.

The guidelines for the establishment of the VC's is contained in the new proposed Subpart G which is to be appended to the existing Part 97 Rules. Subpart G is modeled after Subpart F which contains the Rules for the VE/VEC (volunteer examination) system. "SCRRBA believes that the VE system both has successfully demonstrated the concept of regulatory cooperation between the Commission and Amateur Radio Service licensees and has over time proven to be a workable set of Rules." Highlights of the ***new Subpart G:***

§97.601 - defines responsibilities of the VC which is to manage spectrum so as to minimize or eliminate interference;

§97.603 - indicates minimum frequency coordination information which a VC must provide its constituency and the FCC;

§97.605 - states the requirements for appointment as VC. VC's may join together into larger organizations, but the larger groups may not perform the primary VC duties.

§97.607 - addresses VC certification. Existing coordination groups listed in the *ARRL Repeater Directory* would become the first VC's. Term of office would be three years. Renewal would be subject to a review process which would include both local FCC and ARRL members.

§97.609 - provides for expense reimbursement from repeater owners. A maximum fee of $5.00 would be annually adjusted for changes in inflation.

• The ***Mid-America Coordination Council, Inc.,*** Board of Directors is already on record as opposing the SCRBBA proposal. MACC represents repeater owners in Missouri, Kansas, Iowa, Nebraska, South Dakota, Wisconsin, Illinois, Oklahoma, Minnesota, Colorado, Arkansas, Indiana and Ohio.

Nels Harvey, WA9JOB, (Mequon, Wisconsin) MACC Vice President said the SCRRBA proposal "...is frivolous, constrictive, self-serving and without merit. ...they are asking a fee to solve their problems."

• Several amateurs have submitted comments on a petition (assigned RM-7681 by the FCC) requesting changes in the Rules to ***permit automatic control of stations transmitting AX.25 packet in various parts of the HF spectrum.***

RM-7681 asks that 3.590-3.615, 7.075-7.100, 10.14-10.15, 14.090-14.115, 21.075-21.100 and 28.090-28.115 MHz be set aside as HF packet subbands. The ARRL filed a somewhat similar petition some time ago (assigned RM-7248) which was later withdrawn.

Jay Townsend, WS7I (Spokane, WA) argues that "Amateur Radio needs absolute control over the traffic that it is carrying over the airwaves. There has been, and is now a great debate throughout the amateur community as to content in many, many messages being sent via packet." He opposes the HF frequencies in RM-7681 "...as the worst possible choice."

George W. Henry, Jr., K9GWT (Champaign, IL) argues that HF packet "...occupies a bandwidth of approximately 2 kHz, a grossly inefficient use of our already crowded HF spectrum." He says the 40, 20 and 15 meter frequency requests are particularly ill-advised since they are heavily used throughout the world by RTTY and CW amateur radio stations. "I strongly disagree with the whole concept of setting-aside special frequency subbands for special interest groups, especially for a group that insists on using a wide-bandwidth and inefficient modulation format." He also disagrees with waiving the third party message rules for automated stations.

Dale S. Sinner, W6IWO, publisher of the **RTTY Journal,** concurred with the Henry conclusions.

R. Patrick Dockrey, NG7M (Greenacres, WA) and the *Eastern Washington Amateur Radio Group* also oppose RM-7681. ***Robert Rogers, N8FAU*** urged its adoption.

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WHO THUNK OF IT FIRST?
New Way to Get FCC License

After years of discussing theories for improving its licensing process, the FCC has taken a bold step known as *'Pioneer's Preference'*. Under this system, adopted into Rule Parts 1 and 5, parties who are first to petition the FCC for new spectrum, services or technologies will be the first to receive licenses, free from having to compete with others for the license. Others may be able to apply for licenses later but they will not have the early assurance enjoyed by the pioneer.

Unlike in earlier years, where commercializable radio innovations often came from military or amateur sources, today's FCC looks to the business community to pioneer new technology. Unfortunately, even if a fledgling company accumulates the money and the legal and engineering help necessary to petition the FCC for frequencies, it usually must wait years for action and finally take its place in the long line of competitors applying for licenses in the service it created.

Even then, years of costly litigation may face the innovator when competitors appeal FCC actions to the courts. The American Mobile Satellite Corp. is a case in point. After eight years of legal wrangling with the Commission and competitors to secure its FCC license, it signed an agreement to buy a $100 million satellite -- one of the most RF-powerful satellites ever to be built.

Its competitors promptly won an appeals court case invalidating the FCC's entire basis for granting AMSC a license. Now the company must endure an uncertain future of proceedings and hearings, or it may have to pay the appellants millions just to withdraw their applications. The possibility looms that AMSC may not get to keep its license at all. Meanwhile, Canada has already authorized a companion system to AMSC's and that satellite is on schedule.

To make it easier for innovators to obtain financing, the FCC will *guarantee* the first license to innovators. The Pioneer's Preference is this guarantee. "Our objective in this proceeding is to provide incentive to innovators to either bring forth new services or to increase the efficiency of existing services," said FCC.

"We are convinced that this objective can best be accomplished by giving otherwise qualified innovative parties an assurance that their efforts to develop a new service or technology will result in a benefit if adopted in some general form by the Commission." Multiple preferences could be awarded if the final FCC rules combine elements of two or more proposals. The FCC said it will be on guard against "copycats" who merely file proposals based on inventions of others in the hopes of winning the preference.

Criteria for the preference

Would-be pioneers must meet certain requirements to gain the coveted preference. Their proposals must be licensable. That means that a manufacturer would only receive a preference for an innovative radio device if the manufacturer seeks an FCC license to operate a radio service using that product.

The pioneer must successfully petition the FCC to allocate spectrum to the proposed new radio service. That requirement may be quite difficult to meet, as most of the radio spectrum that could be used for communications is already allocated, licensed and defended by armies of attorneys and trade associations. (Government spectrum may eventually become available for business use, however, if the *Emerging Telecommunications Technologies Act (ETTA)* is signed into law.)

Alternatively, the pioneer may apply to share spectrum already used by others, or it may ask for a license to use its invention to improve spectrum efficiency in an existing radio service. The pioneer must conduct FCC-licensed experiments of its system under Part 5 rules, or it must perform other kinds of technical demonstrations to prove viability and/or market potential.

No money down?

Many were delighted to hear that the FCC decided *not* to require the applicant to show technical or financial qualifications *in order to get a Pioneer's Preference.* Things became more sober when the Commission later pointed out that applicants may still have to show financing and expertise in order to get a *license* to operate.

Finally, the FCC said that the final radio service or rules that result from a proposal must be close to the original proposal. If the final FCC decision turns out to be greatly different from what the innovator originally proposed, no preference would be granted.

Quantum improvements

FCC Chief Engineer Tom Stanley said "We're looking for significant increases in efficiency, not just entrepreneurship but innovation and invention. We want to send the message that this is extremely discretionary on the part of the Commission. We're looking for quantum improvements in service to the public and unless we see that we will not award a preference." Stanley added that only proposals that have not yet reached the Notice of Proposed Rule Making (NPRM) stage will be considered for the preference.

Snail-like process

Although the FCC vote for Pioneer's Preference

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER? *"I am a currently licensed ☐ Advanced, ☐ Extra Class amateur radio operator and wish to be [illegible] your Extra Class license, the following signed statement, and a SASE station or operator license revoked or suspended., I do not own a sig-*

was eventually unanimous, some are concerned that it could make matters worse. "..Virtually all requests for spectrum reallocations will be accompanied by preference requests," Commissioner Sherrie Marshall said. "Each of those will have to be addressed and resolved, thereby further delaying our already snail-like licensing process for new technologies."

Commissioner Ervin Duggan said, "There is the danger of distracting ourselves with hair-splitting debates about what constitutes real newness, novelty and pioneering. And there is the danger of bogging the Commission down in administrative litigation that instead of speeding, delays its efforts to foster new communications services in the public interest." Pioneer's Preference is effective July 30, 1991.

W5YI Computer Watch

APPLE FIRES BACK IN THE GUI WARS

Windows 3.0 is a *Graphical User Interface* (GUI) for the MS-DOS operating system from Microsoft. Windows 3.0 has been a bigger success even than Microsoft anticipated, with millions of copies sold and software developers rushing to produce Windows-compliant products.

On May 13, Apple Computer announced its answer to Windows 3.0 in the form of System 7, an enhanced version of the operating system for its Macintosh computers.

We have used both Windows 3.0 and System 7 intensively, based on both pre-release and post-release versions. Although System 7 seems to make the Mac easier to use than before, and it adds some significant features, it is not a revolutionary departure that would cause mass exodus of MS-DOS owners to Macintosh.

System 7 adds a 3D look to objects on the screen and simplifies the process of copying and moving files. It includes an Alias function and new menu functions both of which enable the user to create iconic buttons or listings to launch programs from anywhere in the system. A utility called Balloon Help causes word balloons to pop up, explaining program features when pointed to with the mouse.

System 7 doesn't permit full keyboard-only operation as does Windows. But more actions of selecting and opening files can now be done from the keyboard. A revamped multitasking system allows the user to run multiple programs at once without cluttering the screen with windows or icons. In Windows a user can tokenize, or "minimize" a running program into a small icon on the screen; in System 7 the user can simply make the running program disappear until it is needed. Long file names, up to 31 characters, are automatically "scrunched" or compressed to fit inside scroll boxes.

Small Mac applications known as DAs (Desk Accessories) and CDEVs (Control Panel Devices) now function as regular Mac programs that do not need special menuing procedures. These accessories even include a map that finds latitude and longitude, and an audio program that can assign animal sounds (Wild Eep, Quack) or user-created sounds to system functions. Networking is a strong point of the new operating system. Multiple Macs can be connected together and can share information without the need for a dedicated file server.

System 7 uses *TrueType,* a typographic technology to be shared by both Apple and Microsoft. TrueType is a format for font files that enables fonts to be scaled to any size and still look good on screen and paper. Existing PostScript fonts that many computer users own can be converted to TrueType by using converters such as FontMonger or Metamorphosis. The new Macs can now read and write MS-DOS disks using an included utility called Apple File Exchange.

Most System 6 applications will work with System 7, but not all of them. A Compatibility Checker program will identify incompatible applications before the user installs System 7.

A forthcoming version of Windows, known as 3.1, will include TrueType and an improved file manager. Later versions will include a revamped file format that will allow longer file names and should decrease disk errors. Windows and System 7 are narrowing the gap between the two computing platforms, and at reasonable prices. System 7 lists for $99 at computer retailers. It can also be downloaded from bulletin boards, but the time needed to do so would likely be excessive. The $99 package includes 90 days of toll-free technical support.

VEC's LOOK TOWARD INCORPORATION

Tom Ingram, K4OOV, moderator of the annual VEC Conference, has named ***Ray Adams, N4BAQ,*** (Chairman), and ***Fred Maia, W5YI,*** to a *Conference Incorporation Committee.* The CIC will look toward incorporating the ***National Conference of Volunteer-Examiner Coordinators*** into a non-profit corporation exempt from federal income taxes under IRS section 501(c)(3).

A draft charter for the corporation is in the process of being drawn up. Incorporation will likely take place in the state of Tennessee where Ray Adams is a C.P.A. The purpose of the corporation will be to provide a medium of exchange of information between VEC's and to act as the vehicle through which VEC's collectively perform their functions ...including maintaining question pools and licensee databases.

AMATEUR RADIO CALL SIGNS

...issued as of the first of May 1991:

Radio District	*Gp."A" Extra*	*Gp."B" Advan.*	*Gp."C" Tech/Gen*	*Gp."D" Novice*
Ø (*)	AAØEM	KFØRE	NØNQV	KBØIZM
1	WR1W	KD1BA	N1IYT	KA1YSX
2 (*)	AA2EF	KF2BO	N2MIO	KB2MVA
3	WN3D	KD3WU	N3JIM	KA3YYE
4 (*)	AC4EI	KO4BA	(***)	KC4ZYL
5 (*)	AA5YD	KI5PW	N5TEW	KB5PPE
6 (*)	AB6CK	KM6AK	(***)	KC6UQF
7 (*)	AA7IN	KG7PG	N7RMA	KB7NNH
8 (*)	AA8DO	KF8NE	N8OHD	KB8MMD
9 (*)	AA9AP	KF9DH	N9LEC	KB9GRW
N.Mariana Is.	AHØK	AHØAH	KHØAN	WHØAAP
Guam	KH2R	AH2CJ	KH2FF	WH2AMU
Johnston Is.	AH3D	AH3AD	KH3AG	WH3AAG
Midway Is.		AH4AA	KH4AG	WH4AAH
Hawaii	(**)	AH6LG	NH6ZY	WH6CMP
Kure Is.			KH7AA	
Amer. Samoa	AH8D	AH8AE	KH8AI	WH8ABA
Wake W.Peale	AH9A	AH9AD	KH9AE	WH9AAH
Alaska	(**)	AL7NA	NL7XC	WL7CCF
Virgin Is.	NP2M	KP2BX	NP2EE	WP2AHJ
Puerto Rico	(**)	KP4RV	(***)	WP4KAN

CALL SIGN WATCH: *=All 2-by-1 "W" prefixed Group "A" call signs have been assigned in all districts 1 through Ø ...except 1 and 3. 2-by-2 format call signs from the AA-AK block are now being assigned to Extra Class amateurs. **=All 2-by-1 Group "A" call signs have been assigned in Hawaii, Alaska and Puerto Rico. ***=Group C (1-by-3) call signs have run out in the 4th and 6th call sign areas ...also Puerto Rico.

According to the rules, amateur call signs from the next lower call sign group are assigned when all call signs from a higher group are assigned.

[Source: FCC, Gettysburg, Pennsylvania]

INTERVIEW WITH ATTORNEY McVEIGH

Represents amateur digipeater licensee

In our May 1st issue we told how the FCC sent violation notices to eleven amateur packet radio station licensees. The charge was transmitting business communications in the Amateur Service. Not only was the alleged message originator cited, but stations along the packet network. One of these intermediaries, ***Richard White, KA3T,*** has retained an attorney in an effort to quash the citation. His only apparent violation was having his packet station on the air which acted as an automatic traffic relay. We arranged to interview his attorney, John J. McVeigh. John was previously with the FCC and is also KD4VS, Advanced Class. Following is a transcript of our telephone conversation, slightly edited for clarity.

W5YI: You were with the FCC as an attorney ...and you are also an engineer.

KD4VS: Yes, I was with the FCC in two different bureaus. I started working at the FCC in the Fall of 1982 in what was then the Broadcast Bureau ...in particular the FM branch. Formerly I was a patent attorney. I stayed in the Broadcast Bureau until the Spring of 1984. In the meantime there was a reorganization and the Broadcast Bureau became the Mass Media Bureau. In the Spring of '84 I went to what was called the Office of Science and Technology - formerly the Office of the Chief Engineer ...in particular, the RF Devices Branch. I did basically Part 15 and Part 18 work ...and to a certain extent, Part 2 work; marketing violations and equipment authorization issues. I was also involved in FOIA [Freedom of Information Act] requests that the OST had received. I later went back to the FM branch as a supervisory attorney and became the Assistant Chief of the FM Branch in 1985. I entered private communications law practicing before the FCC in Washington [DC] in the Spring of 1986.

W5YI: How did you get involved in the packet dispute?

KD4VS: I am a friend of one of the alleged intermediary station licensees who was cited by the FCC. I speak with him frequently via amateur radio. He is also a regular attendee at the JAWS, *Jarratt Amateur Wireless Society* luncheons held in Washington. Jarratt is a surname of Al, W4AQD who is a retired FCC employee. His son is the Engineer-in-Charge of the St. Paul Field Office. JAWS is not a formal organization; merely a luncheon group. Our only function is to have lunch, talk about ham radio and enjoy each others fellowship. The 'meetings' are held on the last Thursday of the month - except in November and December.

W5YI: As you see it, just what are the responsibilities of packet radio operators?

KD4VS: Let me emphasize that I am no longer a Commission employee and no one should construe that I am a spokesman for the FCC. I will relate my best understanding of the FCC position. Essentially, and this came across pretty clearly in your interview with W4JJ (Jerry Freeman, Engineer-in-Charge of the Norfolk, Virginia, field office, who issued the violation notices). The FCC is taking the position that a licensee whose station operates under automatic control

has the same level of responsibility for transmissions from his station as the licensee of the station who is operating under local or remote control.

W5YI: Is that an appropriate rule in view of current technology?

KD4VS: That is a very interesting question. The FCC says their position ...is forced upon them by the wording of Section 310(d) of the *Communications Act* which essentially states that there can be no assignment of a station license or transfer of control without prior FCC consent. They are therefore saying that a licensee needs to maintain control at all times over the operation of his station regardless of the operating mode and that requirement is statutory is nature.

W4JJ said that the FCC cannot construe the Act otherwise and cannot adopt regulations that allow anything but absolute control at every instant of operation. This appears to be the FCC position. I believe that this is inappropriate in light of technological developments ...especially in packet radio technology. In addition, I don't accept the argument that the Commission has a statutory 'gun to its head.'

W5YI: Can you elaborate more on that?

KD4VS: It has been my experience as a communications lawyer - both inside the FCC and outside the FCC - that the Commission has not hesitated to construe the *Communications Act* to suite its regulatory or de-regulatory philosophy and agenda at any given time.

W5YI: Can you give me some examples?

KD4VS: Yes, Section 319(a) of the *Communications Act* says ...and this is not a direct quote, that the Commission shall not issue a license for a station particularly a broadcast station unless it first issues a construction permit for that station. Among amateurs, we don't get construction permits first and then licenses. The Section 319 mechanism doesn't kick in the Amateur Service, but in areas like broadcasting, you must first apply for a construction permit. If the Commission grants the permit, you then build the facility; check it out, make sure it is functioning properly and you apply for a license. The station license is your permanent authority. The construction permit is not permanent authority.

The Commission, at various times, has read that statutory language first one way - and then 180 degrees the other way, and then back 180 degrees around back the first way. The original interpretation of Section 319 of the Act was that you could not construct your facility before you got a construction permit from the Commission. And if you did construct the facility before you got a construction permit, then the Commission was barred by the statute from licensing that facility and you would have to dismantle it. This is similar to what happens in some situations involving local building permits. If you put up a building and you don't have a permit, the local jurisdiction can force you take the thing down and start from scratch.

So originally the Commission said we are not going to license a station unless you have a CP for it before you start construction. In 1984, the Commission said "...Well, we thought about this and there have been statutory amendments and we think the real intent of Congress was that we could not issue a license unless we first issued a permit regardless of whether the station was built before the permit actually issues." There was a broadcast station up in Alaska where an applicant had either fully or nearly built the facility before the construction permit issued. I remember the case because someone else filed a petition against the application complete with photographs and newspaper articles that showed that the thing had been built.

The Commission then said "...well, he did that at his own risk. All that Section 319 requires of us is that we issue a piece of paper called a construction permit before we issue a piece of paper called a license regardless of when the facility was built." That was completely at odds with about fifty years of case law in statutory construction. About three years after that, the Commission did another 180 degree turn and basically went back to the old way.

W5YI: The FCC apparently has a lot of latitude to interpret the *Communications Act...*

KD4VS: That's right. The *Communications Act* is ...a framework, much like the *United States Constitution.* The first amendment to the *United States Constitution* literally says that Congress shall make no laws abridging the freedom of speech. But, there is two hundred years of case law that says that in certain situations the Congress can restrict speech. And the classic example is that it is not a violation of the first amendment to prohibit someone from shouting 'fire' in a crowded theater. Literally shouting 'fire' is engaging in speech. The courts have held that it is constitutional to ban someone from engaging in that kind of speech. It is a question of interpreting the Constitution. The Commission construes the *Communications Act* which in many respects is a very broadly worded document ...much the way that the courts construe the Constitution.

Let me give you another example which amateurs should be able to understand readily. The *All Channel Receiver Act* requires all television sets to have UHF reception capability. The statute was adopted in the

late fifties or early sixties basically at the urging of UHF broadcasters. In those days, many TV sets were marketed without UHF at all, just VHF. These people said we can never develop into competitive broadcast stations unless people can receive us. The only way people are going to receive us is if the manufacturers build UHF capability into the set. The marketplace was impelling manufacturers to add UHF so Congress needs to order them to do it. Congress passed a statute that said you could not manufacture, import or market a television receiver unless a receiver is capable of receiving all TV channels, VHF and UHF.

What happened in 1983 was a Japanese manufacturer, Sanyo, came to the Commission and asked for a ruling to the effect that a specific device that Sanyo wanted to manufacture was not a television receiver and the importation of that device would not constitute a violation of the All Channel Receiver Act or the rules that the Commission adopted to implement that Act.

Basically the device that Sanyo wanted to import and market was a two-channel television receiver. It had Channel 3 ...and it had Channel 4. It was intended for use with video games, personal computers, VCR's, cable systems and devices that generate a modulated signal on Channel 3 or 4. Sanyo argued that all these devices are out in the marketplace. People have no need for all TV channels if they are hooked up to a VCR or a cable box that will select all of these channels and present the output on Channel 3 or 4.

"Clearly", Sanyo said, it's permissible to market a video monitor that accepts only base band video information - because that is not a television receiver. It has no IF or RF stage. What we would like to make and import is the functional equivalent of a base band video monitor. It has an IF and RF stage in it, simply because all these video sources that are available generate RF outputs. Not that many generate base band video outputs. So even though this has an IF/RF stage, an audio/video detector, video drive circuitry, color detection and a CRT and an audio amplifier and a loudspeaker, it is not a TV receiver.

The Commission said "Yes, that is right, even though it has all the elements of a TV receiver, this really represents the technological advance and no one in their right mind is going to buy this for direct over-the-air broadcast reception because they will only be able to get one channel. You won't find Channel 3 and Channel 4 signals in the same area because the Commission separates 3 and 4 due to interference considerations. The only reason people are going to buy this thing is for use with VCR's, closed circuit video, a video game, a PC monitor or cable system ...uses other than over the air direct broadcast reception. So this device is outside the scope of what Congress contemplated when the Congress passed the *All Channel Receiver Act.*"

This case has been up and down several times. It has been up at circuit court, there were several layers of appeal within the Commission before it went to circuit court. Circuit court sent it back down. The Commission chewed on it a little more and restated its position and went back up to the circuit court. The court ultimately affirmed the matter to the Commission in 1988.

This is a perfect example where the Commission has taken statutory language which says you shall not market a television receiver unless it has all channels and applied that to a case where you have a device which has every element of a television receiver in it and found that this is not a TV receiver for the purposes of the Act.

The FCC interprets the statutes to suit its own ends ...and to accommodate what it believes to be the concerns of the *Communications Act....* Certainly when the *All Channel Act* was passed, Congress couldn't have envisioned things like video games and video cassette recorders being in every home and people having the need for a TV set that would only tune one or two channels. This is highly technical stuff, but I think you can see the parallels to the packet situation. The Commission is taking language that the Congress wrote in 1934 and applying it in a very literal sense saying "Black is Black ...and that's it." In the Sanyo situation, for example, the Commission essentially said "In this particular case black is white ...and not black."

Here's another example: CB licensing. Section 301 of the Act says no one may operate a radio transmitter without first getting a license from the Commission. Back in the sleepy old days when I was first licensed as an amateur I guess there were a good number of CB operators ...but not millions and millions. People would apply to the FCC and get their call letters and get on the air. In the middle seventies there was an explosion of popularity in CB mainly due to the oil shortage and the trucker.... Suddenly the FCC is inundated with millions of applications. To get out from under the administrative nightmare of licensing these millions of people, the Commission basically granted a blanket license for everyone. Again, the Commission construed the *Communications Act* to suit its own agenda.

W5YI: What should the Commission's rules be considering current amateur packet radio technology?
KD4VS: The Commission has already stated a fairly reasonable standard ...particularly in the case of intermediaries. They did so in a 1986 *Memorandum*

Opinion and Order. Basically what they said was that we recognize before-the-fact screening of packet messages in the case of intermediary stations is impossible ...and that only after-the-fact screening is possible in the vast majority of situations. It is incumbent upon amateurs using the packet service to detect problematic messages and inform the operators of the packet stations that this message is floating around so they can kill it ...an after-the-fact review, not a before-the-fact review.

The stance of the Commission now appears to be is that you must screen all messages before the fact regardless of whether you are operating under automatic control at the peril of your license.

Let me read you some language from the Commission's decision. This is the *Memorandum Opinion and Order* in PR Docket 85-105 which was released in October 1986. The Commission said in paragraph 8:

"When an amateur station is under local or remote control, the control operator at the control point directly supervises every transmission thus all transmitted messages are screened. Such is not the case where the station is operated under automatic control; only after the fact screening is possible since the control operator can only indirectly supervise the station transmissions. For this reason, our rules prohibit the transmission of third party traffic from any amateur station under automatic control. While screening of messages at the entry points serves to prevent the introduction of improper messages into an ARRL AX.25 packet protocol network by amateur stations, it remains for monitoring by other amateur operators to detect the introduction of messages from non-amateur stations. According to the petitioners, the nature of the ARRL AX.25 packet protocol is such that control operators of intermediately transmitting stations are unable to fully screen retransmitted messages thus the packet network is vulnerable to unauthorized use. The design of future retransmitting networks should take these matters into account more fully."

The Commission then goes on to say, "...with respect to the matter of automatic control of intermediate retransmission stations, we acknowledge the safeguard assurances by the petitioners for the ARRL AX.25 packet protocol. ....control operators capable of monitoring ARRL AX.25 packet protocol transmissions must alert the responsible control operator of any intermediate retransmitting station under automatic control of any misuse of the station so that prompt corrective action will be taken."

What the Commission is now saying ...or at least one engineer-in-charge is now saying is that even though you cannot fully screen messages before the fact, you are responsible for any violation ...any misuse of your facility. That is asking people to do the impossible. The Commission is saying that if you are going to operate your station under automatic control - or allow others to operate your station under automatic control, you need to fully screen each message before transmission. This basically means you can not operate under automatic control. This is the position that I am taking with the FCC.

W5YI: In your opinion, what needs to be done to correct the deficiencies that exist in traffic handling under automatic control?

KD4VS: Certainly the FCC needs to reconcile its fairly reasonable statements in 1986 with its apparently stricter interpretation of control responsibilities at a minimum. The Commission needs to do that, because if you read the 1986 order you come to the conclusion that the FCC does not expect you to do the impossible. The most recent explanation is that the Commission expects you to do the impossible ...and if you don't do the impossible, you endanger your license. We need a clarification, and the only proper context for that is rulemaking.

In my view, the responsibility should fall primarily on the originator of the message ...if the Commission can properly identify who that is. The Commission may want to impose some responsibility on the operator at the entry point to the packet system. For the Commission to impose the same level of responsibility and liability on intermediary retransmitters as on the originator of the message or the operator of the gateway to which the message gets into the system is absurd.

I think that the Commission can justifiably be concerned if an intermediary fails to take prompt action upon discovering the presence of an inappropriate message but I don't believe that the Commission can continue in its current stance. Either that, or the packet system as we know it is history. They are saying you can operate under automatic control but you need to screen all messages beforehand. Full screening means you are not operating under automatic control. The Commission can't have it both ways. They either need to revoke automatic control privileges entirely for the service, or they need to clarify their standard of responsibility and take technology into account.

W5YI: Was the message in question a prohibited or inappropriate communication in your opinion?

KD4VS: I was very troubled by the position Mr. Freeman took. He said this was a prohibited business communication and would have been prohibited even

if the message did not have a 900 number reference in it. The transmission of this message, if it occurred, is not a violation of §97.113. It is, in fact, constitutionally protected speech. There is nothing in that message that has any commercial aspect whatsoever. The message urges people to vote by phone and to express their opinion on a matter of supreme national importance during a time of international crisis.

The question of appropriateness is like asking is it proper to discuss politics at the dinner table ...or is it suitable to discuss religion with strangers. We each have our individual ideas about propriety of discussing politics at the supper table ...or over amateur radio or discussing religion in similar context. The issue here is not a question of whether it is appropriate or not, but whether it is illegal. I may not discuss politics over the air for the same reason that I don't discuss politics at the dinner table ...but I have a first amendment right to do it.

If you look at this message, there is nothing in there that is business. The Commission is interpreting business communications extremely broadly. The FCC's correspondence with me points to a 1983 order which the Commission says "We intend the prohibition on business communications to be as broad as possible."

The FCC is construing the transmission of this message as facilitating the regular business activity of the "Coalition to Stop U.S. Intervention in the Middle East." My understanding of the coalition is that it was an ad hoc group that came together on this issue. People may not like the discussion of politics over amateur radio but that does not mean that it is illegal.

The presence of a 900 number referenced in the message does not alter the situation as far as I am concerned. 900 area code phone numbers are simply methods of accounting employed by telephone companies. [The issue of fee splitting] ...is a matter of private contract between the telephone company and the 900 service provider. If you so wish, you could take out a 900 number that results in no financial benefit to the provider. If this is a business transaction, then transmitting a message that says "...call or write to your congressman" about an issue is also a business communication in that it is furthering the business of the telephone company or the United States Postal Service.

There is a doctrine in first amendment law called 'overbreadth.' Let me give you an example of overbreadth. A town may be concerned about litter and may pass an ordinance banning littering ...making it an offense. But the town man not pass an ordinance banning the distribution of political handbills or flyers in an attempt to control litter because that is 'overbreadth.' The FCC position is void ...it's fatally flawed because it is overly broad.

The FCC may have a legitimate interest in cracking down on blatant commercial use of amateur radio. That is not the situation here. If the FCC wanted to crack down on the alleged commercialism of packet networks, there must have been far better message for the FCC's purpose to pick on than this one. This is political speech in its purest form ...it is entitled to the highest degree of protection.

W5YI: How far are you going to push this? The amateur community is very interested in what you are doing.

KD4VS: The FCC has issued a *Notice of Violation* to my client. My position is that the FCC has to retract the *Notice*. What they have done with some of the intermediaries after receiving a response that says I am screening all @USA messages is saying, "All right we are not going to take further action because you have taken corrective action to prevent recurrences. That response is not good enough.

The Commission needs to retract the *Notice of Violation* against Mr. White. We have admitted no facts and the Commission has not established a violation in the first place. Mr. White had a perfectly clean FCC record before this *Notice of Violation.* The FCC needs to restore the status quo. The *Notice of Violation* is utterly groundless and the Commission needs to take it back and expunge it from Mr. White's record. That is the only thing that will satisfy me and my client.

Admittedly, this case arises in a much larger context. I am representing one amateur who has been unjustly charged by the FCC. Five hundred thousand amateurs can be affected by the outcome of it. I understand that. I am not representing 500,000 radio amateurs. The proper context for clarifying the responsibilities for 500,000 radio amateurs is in rule making.

W5YI: Any closing words?

KD4VS: While I have taken strong issue with the Commission in this matter, it does not mean that I think the FCC is a bad institution. I have great reverence for the FCC as an ideal. It does not always live up to that ideal sadly, but that is true with any human institution. There are some wonderful people who work at the FCC. There are also some not so wonderful people. I am painfully aware of the limitations that FCC staff people work under and I have a great deal of sympathy for them in many respects. I hold the FCC to a very high standard just as the FCC holds us amateurs to high standards. That is only appropriate on both sides of the equation. *(Conversation: May 18, 1991)*