

# news

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.

BI-MONTHLY  
**REPORT**

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## Ray Kowalski Leaves FCC After 19 Years!

Everyone is shocked at the sudden resignation of career government official Raymond A. Kowalski, who tendered his resignation last week and is leaving for a law position in the private sector. He told us that principles from a Washington legal firm walked into his office two weeks ago and made him an offer he could not refuse. "It is as simple as that," Ray said during a telephone interview held just before Christmas.

Kowalski was made Special Services Division Chief (which oversees the Amateur Radio Service) in June of 1982 when a reorganization of the FCC's Private Radio Bureau resulted in the creation of that division. Prior to that, Ray headed up the PRB's Compliance Division.

The chain of command at the FCC in Washington works something like this. Branch heads report to Divisions. Johnny Johnston, W3BE, Chief of the Personal Radio Branch answers to the Special Services Division. The (§Part 87) Aviation and (§Part 80) Maritime Radio Services are also under the Special Services Division. Division Chiefs report to Bureau management.

Ralph Haller, N4RH and an engineer, had just been promoted during mid-December from Deputy to Chief of the FCC's Private Radio Bureau - a position he had held for a

year. Haller, who joined the FCC in 1971 as a radio inspector, was previously a broadcast engineer for a Kansas radio station. When he became PRB Acting Chief, Kowalski moved up to the Acting Deputy PRB Chief slot.

Everyone naturally figured that Haller and Kowalski would be the new Private Radio Bureau management team. The question being focused on was who might replace Ray as Division Chief. Roger Madden, an engineer and Kowalski's assistant, was the logical choice.

Kowalski leaving the FCC after nearly two decades is something of a bombshell! "I would not have left the Commission for a frivolous or even an equivalent position on the outside," he said. "I have been offered something considerably more - both in the immediate future and well as prospects and opportunity for beyond. That was my motivation in deciding to leave. It was a tough choice to cash in nineteen FCC years."

A rumor had it that possibly Kowalski may have been passed over as Deputy Bureau Chief, but Ray said this was not the case. "I have every reason to believe that I would have been permanently promoted into that position," he said. "The (law firm) offer was so good that it didn't matter." Ray starts with the communications law firm of Blooston

& Mordkofsky on January 4th.

When asked if he felt Madden would become the new Special Services Division Chief, Ray noted "When you get to the Division Chief level, it is not a matter of simple progression." Ray laughingly said that some of his views were not always shared by Madden. "He has some definite ideas about Amateur Radio."

## EVENTS DURING THE KOWALSKI REIGN....

I asked Ray about what he felt were the most significant amateur radio achievements during his five years as Special Services Division Chief. "Without a doubt," Ray said, "the two key things are the Volunteer Examination System and Novice Enhancement."

## ON THE VOLUNTEER EXAMINATION SYSTEM

Ray said he was not as optimistic about the volunteer examining program as he had been previously. "I think we are going into a critical phase of the program," he said. "The amateurs responded so well to the initiation of the program. Volunteer Examiner Coordinators came forward. Amateurs joined up to become volunteer examiners. At first there were some administrative glitches. Now the administrative system is working very well. From that standpoint, the VE/VEC system has been a huge success."

"Now we are getting into the phase where people are beginning to test the program and that happens whether or not the government is running the system or volunteers are running it. It is not a function of who is running it. It is only a function of the program. We know from running systems over the years that you go through this phase where people will test the system and get what they are not entitled to. That is what we are seeing now in various parts of the country. I don't think one part of the country is unique. We are going to see similar instances popping up probably in a half a dozen places over the next year to year-and-a-half."

"Efforts have to be redoubled as far as the integrity of the VE/VEC system goes, because what you find is that people have

interpretations of what does this mean. There is a certain mind-set out there that is sometimes even shared among the test givers, much less the test takers. That mind-set being that 'if you beat the system you are beating the FCC.' Well, that is not the case. You are not beating the FCC, you are beating Amateur Radio. That is what the volunteer examination program is facing today. It is a natural function of programs that people out there will try to beat any system. The next year or so will be critical to the permanence and staying power of the VE/VEC program."

I mentioned that the next VEC Conference would be held in Dallas during the Ham-Com Convention and that perhaps the VEC's could contribute towards bringing key FCC personnel to that meeting. Ray said that "In terms of the FCC's budget, 1988 shapes up not only as a lean year, but an austere year to the point where there will be virtually no domestic travel. This is going to be a very difficult year from the point of view of our being able to get out into the real world and discussing amateur issues. Even though a travel expense is reimbursed, we still have to budget it as though it were coming out of our own budget."

## THE 'NO CODE' AMATEUR RADIO CLASS....

We also discussed a "non-event" during Ray's watch - that being the Docket 20282 'No-Code' proceeding of the early 1980's.

"Being an attorney, I can professionally argue either side of any issue," Ray told us. "During the internal debates during that subject, I was assigned the task of arguing the side in favor of 'no-code.'"

I asked Ray what were some of the points he made: "I discussed the actual practical use that Morse is used in the service today, ...the technological equivalents that exist in terms of code readers and keyboards, ...the fact that if you stop and analyze the actual emergency traffic that takes place during earthquakes, volcanoes and other natural disasters - folks aren't really using code, ...they are using packet and voice."

"I analogized it to computers where

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER?  
I am a currently licensed Extra Class amateur radio operator and  
with to be a volunteer examiner. I have never had my station or  
operator license revoked or suspended. I do not own a significant  
der the W. Ref. Pr. m? P. P. se } co  
of your Extra Class license, this signed statement, and a SASE

you don't have to know a lick of programming in order to be able to skillfully and beneficially use a computer. Similarly, you don't have to know a lick of Morse code in order to skillfully operate an amateur radio station. And if you have need to copy a Morse transmission, you can buy a keyboard/reader. These are some of the points that I argued. That doesn't necessarily mean that I felt them personally"

I asked Ray exactly how does he feel about a beginning no-code ham license. He hesitated what seemed an unusually long while. "I have long felt that Morse is an important part of the Amateur Radio tradition. I don't know that I would necessarily have so much of my Amateur Service program keyed ...no pun intended ...around Morse ...determining every privilege and every rank in the service. But I do feel that there ought to be a mandatory exposure to Morse ...if for nothing else than to carry on that tradition ...and to make sure that the capability lives on."

### FUTURE RULEMAKING....

Kowalski said that the two principle Amateur Radio matters his office had been involved in recently had been "put to bed" and were awaiting their regulatory turn for a Commission ruling. "You can expect to see something on a rewrite of the §Part 97 Rules about the beginning of March. PRB-3 (amateur call signs of choice) will come up shortly afterwards - more to the middle of Spring." (The 220-222 MHz issue is not a Private Radio Bureau matter. It has its roots in the FCC's Office of Engineering and Technology.)

We personally will miss Ray. He always had time to talk to us and to give us an opinion or an update. Kowalski will long be remembered are being very responsive to Amateur Radio and its needs. "Over the years, people may have disagreed with some of the things I have said and done but no one can say that I haven't cared about Amateur Radio."

Ray said that he felt that the FCC's involvement in Amateur Radio would proceed on pretty much an even keel. "My own

individual voice and judgement of things has never been the last word on anything around here. I would not expect anyone else in my position will have a noticeable degree of difference in the outcome.

Ray lives in the Washington, DC, suburb of Vienna, Virginia. He and his wife, Jean Ann have three children, Jenifer, 16, Jason, 13 and Amanda, 8. We wish him well in his new position.

### HAMS HANDLE FREE PHONE CALLS HOME

Thanks to GTE's U.S. Sprint, the long distance carrier, Tony Paladino, WA5ORS, of New Orleans and his crew of volunteer ham operators are once again handling toll-free phone calls home for U.S. service personnel away in faraway places during the holidays. Phone calls are handled from any nation that has third party privileges with the United States or from U.S. registered vessels.

The annual "Phone Home" program started December 20th and extends to January 12th. Tony has about twenty ham operators scattered throughout the USA standing by on the ham bands who can run the toll-free holiday phone patches. These operators have special telephone access codes that allow them to call into the Sprint telephons network without charge. The cost of the landline portion of the telephone call is underwritten by Sprint as a public relations gesture. U.S. SPRINT even provides the acronym for their effort ...United States Service Personnel Radio International Network Traffic.

The frequencies where toll-free operators are standing by around the clock are 14.313, 14.280 21.390, and 21.404 MHz in the 20 and 15 meter bands. All that U.S. military personnel need do is get permission from their commanding officer to call home through a local or military ham or MARS (Military Affiliate Radio System) station.

The remote ham station simply calls on these frequencies and asks for a "U.S. Service Personnel Operator." Tony says they prefer to use the term U.S. Service Personnel rather than military so that no one listening will know if the call if for military or civilian

New Illustrated Novice Voice Class Textbook  
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Oscillator and Battery \$9.95 + \$1.50 shipping.  
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done or your money back: huge discounts for class  
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formal classroom training. \$10.95 + \$2.00 post.  
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people. Tony says that the free phone service is not limited to the military. They also handle many free holiday phone calls for U.S. personnel in foreign embassies, Canal Zone Corps of Engineers, technical employees overseas ...and the like.

To get the word out about the free "Phone Home" program, the Pentagon has provided the network with publicity via Armed Forces Digest magazine, armed forces radio and Armed Forces News. Last year, Tony and his crew handled hundreds of free phone calls for servicemen overseas. They expect to run even more this year.

Some of those telephone calls will be coming from service personnel in Korea where third party traffic is normally prohibited. The Government of the Republic of Korea has authorized amateur stations (call sign prefix HL9) to handle third-party traffic between December 19 and January 4th.

## COMPUTER STUDY OR TESTING SOFTWARE

The DeVry Amateur Radio Club is exclusively offering IBM-PC XT-AT (MS-DOS) compatible computer software to volunteer examining teams to assist them in preparing properly constructed amateur radio examinations at the Novice, Technician, General, Advanced or Extra Class level.

There are five separate disks - each has all current pool questions and multiple choice answers for a particular element along with a selection routine on a 5¼" disk. The software generates the examination (and answer key) according to the VEC/FCC approved formula which requires a specified number of questions from each subelement. The program will not select somewhat similar questions on the same examination.

The software, which costs \$20.00 per element (postpaid), can be used in any of three ways. (1.) A hand-picked exam or; (2.) a random computer-selected exam can be generated and printed - or - (3.) the software can be used by the VE team to allow the applicant to actually take the examination at the computer keyboard. An answer sheet is generated after the examination.

The examiner selected test question feature is particularly useful for testing handicapped applicants where, for instance, you would want to eliminate circuit diagrams from an examination for a blind person.

Jim Georgias, W9JUG, manager of the DeVry-VEC program uses similar software in his testing program and he has certified that the software meets the required VE/VEC testing standards. While the Novice (Element 2) examination software may be purchased by any amateur, General Class or higher, the Technician (Element 3A) through Extra Class (Element 4B) VE programs are only available to accredited volunteer examiners of any VEC program.

We have already approved use of these programs for W5YI coordinated examination sessions. Use by other than DeVry and W5YI VE teams is subject to approval by their VEC. The multiple choices (and correct answers) are the same as universally used by all VE teams and VEC's.

Orders for VE Testing Programs go to: DeVry Amateur Radio Club; 3300 North Campbell Avenue; Chicago, Illinois 60641. Order: Test Disk 2-T (Novice), 3A-T (Technician), 3B-T (General), 4A-T (Advanced) or 4B-T (Extra Class.)

Applicants that have IBM-PC compatible microcomputers can order up-to-date computer study disks from: Diamond Systems, Inc.; P.O. Box #48301; Niles, Illinois 60648. All computer-assisted instruction software allows applicants to study specific examination subelements and take sample tests at the keyboard.

Each disk also contains an excellent user-definable CW (Morse) practice program. Applicants can study random character groups, stored text or specific characters. Provisions are also made for the user to select Paris or Farnsworth spacing (faster transmitted characters with longer spaces between characters) at any code speed. Cost of the study software is \$39.95 each (postpaid) for the Novice, Technician or General amateur radio operator classes, \$49.95 for the Advanced or Extra Class disks.

W5YI-VEC  
P. Box 101-  
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HOLDING AMATEUR RADIO OPERATOR CLASSES?  
an priced manual? We have that!  
Every manual contains every word-for-word question,  
Test Manual: 1 Ea. \$1.00  
Novice \$3.50  
Tech. or Gen. \$4.00  
5-9 \$3.50  
10 or more \$3.00 plus postage  
plus postage

## NOVEMBER HAM LICENSING STATISTICS...

	November	1985	1986	1987
First Time Amateurs:	910	1404	1131	
Novice Class Upgrades:	498	698	647	
Technician Upgrading:	239	262	231	
General Class Upgrading:	240	300	224	
Advanced Class Upgrading:	171	190	134	
Total Amateurs Upgrading:	1148	1450	1236	
Total Dropped Fm Service:	1296	782	743	
Total Novices Dropped:	N/A	471	354	
Change/Ham Census/Month	-386	+622	+555	
Month End Census:	413642	419258	431301	

Extra	Advan.	Gen'l	Tech.	Novice	TOTAL:
(November 1985)					
38305	977781	117082	83387	77087	413642
9.3%	23.6%	28.3%	20.2%	18.6%	
(November 1986)					
40989	97821	115998	85431	79019	419258
9.8%	23.3%	27.6%	20.4%	18.9%	
(November 1987)					
43608	98383	114396	92618	82296	431301
10.1%	22.8%	26.5%	21.5%	19.1%	

Club/Military/RACES Sta.	2753	2614	2411
<b>Total Active Stations:</b>	<b>416395</b>	<b>421872</b>	<b>433712</b>
Percent Increase:	.9%	1.4%	2.9%

**Interesting Statistic:** For the first time, California now has more than 60,000 licensed amateurs (60,222 to be exact) - more than twice as many as the nearest state (#2 Florida has 26,381.) Balance of "Top Ten" states are: (3.) New York 25,989; (4.) Texas 25,613; (5.) Ohio 20,807; (6.) Pennsylvania 17,531; (7.) Illinois 17,515; (8.) Michigan 14,266; (9.) Washington 13,563 and (10.) New Jersey 12,901.

[Source: FCC, Gettysburg, Pennsylvania.]

## RADIO MILESTONES: FIVE YEARS AGO

January 1983 was a big month ...perhaps the biggest month ever ...in terms of proposed personal radio rulemaking at the FCC when four blockbuster Notices of Proposed Rulemaking were issued.

FCC 83-1 proposed to Implement the Final Acts of the 1979 World Administrative Radio Conference. The NPRM ran to 303 pages. In the fine print was the following ominous paragraph which few amateurs apparently saw: "The current and future spectrum

requirements for the 220-225 MHz band are undefined at the present time. Therefore a joint FCC/NTIA working group has been established to study the spectrum requirements and develop a proposed allocation for this band. Until this study has been completed, we are proposing to maintain all three allocations, amateur, fixed and mobile, as primary allocations. However, we will not implement fixed and/or mobile services pending further rulemaking."

FCC 83-19 proposed a new 900-MHz innovative (non-amateur) automatic trunked radio service to be known as PRCS - Personal Radio Communication Service. It was to be sort of a long distance cordless radio service whereby you could make mobile radio telephone calls from your car through your own home telephone up to 25 miles away using repeaters or direct.

FCC 83-22 proposed the use of a team of three volunteer amateurs to administer all amateur radio examinations above the Novice class with "umbrella entities" to coordinate the efforts of volunteer examiners.

FCC 83-28 proposed two 'no-code' amateur radio class options allowing operation above 50 MHz (although the FCC said they would consider operation down to the 30 MHz level.) One would eliminate the code requirement from the Technician class - the other would create a new Experimenter Class license with a harder written examination (Element 5) than the existing Technician Class.

Only the Volunteer Examination program was eventually adopted as proposed. A permanent allocation of the 220-225 MHz band has now been proposed (FCC 87-14) and awaits final action by the Commissioners.

Effective January 4th, William J. Tricarico, FCC Secretary for the past ten years will become the Executive Assistant to the Secretary of the Nuclear Regulatory Commission. Petitions for Rulemaking and comments should now be sent to R. Walker Feaster who has been named Acting Secretary. For the past 14 years, Feaster worked in the FCC's Office of the Managing Director.

## OBTAINING A HAM LICENSE IN THAILAND

We received a letter from Charlie Kelley, W5SPK, (also HS1AOD) in Thailand letting us know that he got his radio equipment back after it was confiscated by the Thai authorities. (See W5YI Report 7/15/87 p.8) All charges were dropped. Amateur radio, new to Thailand, is proceeding on schedule.

Our licensing system is a 'snap' compared to that of Thailand where the red tape one must go through to become an amateur is absolutely unbelievable. Charlie sent us a transcribed copy of what it takes to get a VHF only ham ticket in Thailand.

(1.) After you must pass a license examination, PTT (Postal Telegraph Telecommunications) officials send your name to the police department for a background security investigation.

(2.) Once approved by the PTT, the application is then sent to the VR (VHF ham group) committee for their consideration.

(3.) You must apply for permission to buy, transfer or import amateur radio equipment.

(4.) Once ham equipment has been procured, it must be inspected by the PTT. The PTT then issues a Possession license, Use license, and Radio Station license. Three licenses are required for base or mobile amateur operation. Only the Use and Possession license are required for handi-talkie or portable transceivers.

(5.) The Radio Station license costs about \$40 U.S., Use license \$4 U.S. and Possession license, \$2. Importing radio equipment costs another \$2 for the permit. All fees and licenses must be paid and renewed annually.

(6.) Another \$40 U.S. fee applies if you change the permanent ham station location.

We have a W5YI-VE team in Thailand and they have now conducted two testing sessions - the first ever in this nation. Texas Congressman Jim Chapman has approached the State Department concerning reciprocal operating privileges with Thailand.

Charlie/W5SPK has been in Thailand for nearly five years now and even though he has a Thai amateur call sign and equipment, he has yet to operate. He is working on it.

● The joint Soviet/Canadian ski-trek DX-pedition will determine exactly where they are by using international Search And Rescue Satellites (SARSATs) in conjunction with amateur radio. Every day, the skiers will key an ELT (emergency locator transmitter) which will be received by a SARSAT. The received signals will be analyzed by SARSAT and the skiers location will be determined. That location will be relayed to the University of Surrey in the United Kingdom and transmitted on 2-meters over the digitaizer on the university's UoSAT OSCAR 11 amateur radio satellite. Skiers will copy their location on a hand-held transceiver as the UoSAT OSCAR 11 satellite passes overhead. (Thanks: VE3GRO)

● Alpha linear amplifier manufacturer, Ehrhorn Technological Operations, Inc. (ETO) has a new Sales and Marketing Director. He is Mark Forbes/KC9C. Mark has a BSEE and an Extra Class ham ticket. Most recently, he was editor of Computer Technology Review with 60,000 circulation. Mark holds one U.S. patent, has written three books, dozens of technical articles and was an associate editor of the ARRL technical publication, QEX.

● Alinco Electronic, Inc., has a new promotion. When a ham purchases an Alinco transceiver between January 1 and March 31, he will receive a Larsen antenna for only \$15 (or \$25) complete with hardware and coax.

## PHONE PATCH LINES GET LOWER RATE....

Repeater owners take note. Southwestern Bell has recently downgraded their telephone service classification for ham radio patch lines from commercial to residential. This came about when Gene Demuth, W5FJD, of Fredericksburg, Texas, obtained a favorable ruling from the Texas PUC (Public Utilities Commission) requiring GTE to charge a residential rate.

Following that, the Big Spring Amateur Radio Club asked Southwestern Bell to lower their rate to R-1 (residential.) Bell checked with the PUC and granted the lower rate and refunded Big Spring over \$1,000 in back overcharges. The Snyder (Texas) ham club was notified, however, that since their repeater was located on a commercial tower, the

commercial rate should apply. Bell changed their guidelines, however, when notified of FCC Rule 97.100 prohibiting all business communications. Snyder's phone bill dropped from \$24.20 to \$11.00 monthly.

Don Mosher, WB5BRY, and the Caprock Repeater Club of Lubbock, Texas, was also successful in getting the residential (R-1) rate. The Lubbock club will receive a \$2,002 refund representing 17 years of back overcharges!

Even though these rulings apply to Texas, it should apply everywhere since amateur communications are just that ...non-commercial. If your club is paying for a business phone line into your repeater, you might want to contact the telephone company and ask for residential rates. (For more info contact: Paul Gilbert/KE5ZW Tel. 915-573-2163.)

### DRAFT OF ELEMENT 4(B) POOL RELEASED

A preliminary form of the new Extra Class question pool has been completed by the Question Pool Committee headed up by Jim Clary/WB9IHH and assisted by Don "Mac" McGrath/KZ1A of the ARRL-VEC. (Other members of the QPC are Ray Adams/N4BAQ and R.C. Smith/W6RZA.)

Apparently few responses were received from the field even though we (W5YI-VEC) sent out several hundred copies of the Element 4(B) syllabus to our VE teams for comment.

Fifty questions have been deleted from the FCC PR-1035D, thirty-eight new questions were written and many were reworded. The QPC and the League has done an outstanding job in revamping the Extra Class question pool. Reply comments on the new Element 4(B) Extra Class question pool are due by February 1, 1988.

On March 1, 1988, the new Element 4(B) question pool will be officially released although it will not be used in actual examinations until six months later, November 1, 1988. Except for FCC rule changes and typographical errors, the pool will not be revised again for three years.

The QSL cards from the Indianapolis, Indiana, W87PAX (1987 Tenth Pan American) games have been printed and should be in the mail by the time you read this. The card is actually a double fold-over QSL with the two outside panels in full color showing the station and operating crew. More photos and a short history of the W87PAX operation are inside along with the standard QSO report form. Mike Koss/W9SU advises that approximately 10,000 requests for the QSL have been received plus another 1,000 from non-ham shortwave listeners. Operating achievement certificates will follow. The event organizers had 25,000 QSL cards and 2,000 certificates printed.

### REPEATER SUBBAND EXPANSION PROPOSED

The Southern California Six Meter Club (SCSMC) of Cypress, California, has filed a Petition for Rulemaking seeking to expand the present six meter repeater subband from 52 to 54 MHz by one megahertz to 51 to 54 MHz.

The SCSCMC argues that the expansion of the repeater subband would make better use of amateur six meter spectrum and would:

- (1.) ...reduce the possibility of TVI.
- (2.) ...alleviate six meter repeater congestion.
- (3.) ...provide greater flexibility for frequency coordinating groups.
- (4.) ...eliminate the need for non-standard repeater splits in areas where 53-54 MHz is unusable due to television interference susceptibility. (Users must avoid 53-54 MHz where Channel 2 is utilized.)
- (5.) ...allow additional spectrum available for radio control to be coordinated.
- (6.) ...expansion of the repeater subband will not disturb existing six meter operations.
- (7.) ...implementing the proposal will have no financial impact on the Commission. The matter is not controversial.

The SCSCMC states that in 1971 only 58 repeaters were listed in the ARRL Repeater Directory. By 1978, this grew to 169. "The steady, regular growth of the number of repeaters in the six meter band now exceeds 250," they write in their petition which was filed with the Commission on December 14th.

SAME DAY SHIPPING! multiple-choice answer and tells you which answer is correct. (B) r'tai lippi rig (On ea) on 18.9 istp: charges are included.) (Complete Morse Code Course: 0-21 w.p.m.=\$29.95, ppd) PLUS Postage \$1.25 75¢ each manual.

● The FCC's field offices are still trying to control illegal Citizen's Band operation. On November 16th, U.S. Marshalls and engineers from the FCC's New York Office raided the Brooklyn residence of Ms. Palma Russo and confiscated her high power rig that operated on other than CB channels. She had previously been fined \$2,750 by the Commission. On December 4th, the Atlanta FCC Office has seized an estimated \$10,000 worth of equipment from the residence of Althur Ford of Ellenwood, Georgia - including an illegal 10,000 watt linear amplifier. Both Russo and Ford face fines of up to \$100,000 and one year imprisonment.

● The Federal Register of December 15th advises that Part 90 Land Mobile (business band) transmitters with external frequency programming controls shall not be manufactured in or imported into the United States after March 15, 1988. Marketing of these radios must cease a year later - March 15, 1989. The action was taken to inhibit users from entering unauthorized transmitting frequencies. The FCC said that a few years ago it was difficult to change a transmitter's frequency since it usually involved opening the case, installing a new crystal, and retuning the radio. Inexpensive frequency synthesizers available today, however, allow simple frequency programming using front panel controls. Hopefully, outlawing land mobile transmitters with external frequency controls will reduce the increasing interference to authorized operations, particularly to public safety radio systems.

● The next two morsels come from a newsletter published by a private TSCM, (Technical Surveillance Counter Measures ...otherwise known as a communication debugging) expert. It has widely been reported that the new U.S. embassy in Moscow now under construction can never be used because it "has more bugs than a draft horse in July." The bugging expert reports that this may not be totally the case. Reportedly, the Soviets dumped thousands of small, old electronic components in the poured concrete to set up non-linear junctions. When the walls are tested for "bugs", the old diodes and transistors are emitting harmonics of the exciting frequency setting up false bugging alarms.

● The newsletter also reports on the Electronic Communication Privacy Act (ECPA) of 1986 which is called wild, unenforceable and may be doing more harm than good. Criminals can use cellular telephones in their crimes because they know their conversations can't be used against them because law enforcement must get a court order to legally listen to what they are broadcasting on the airwaves. "The ECPA protects nothing. If you believe that legislation can 'protect' your broadcast conversation from being overheard, we have an experiment for you - and any congressman who thinks he has such power. First let Congress pass a law which prohibits piranha fish from biting our citizens. Let's make it a felony. Then you, or your congressman friend, go jump in a river full of piranhas. Let me know how you make out." Supposedly, the Justice Department has announced that it will make no effort to enforce the law.

● On December 7th, the FCC sent "show cause" letters to two California "Dial-a-Porn" providers -- Intercambio, Inc./San Jose and Audio Enterprises, Inc. of Mill Valley. The Commission can levy civil fines of up to \$50,000 per day upon those who, for commercial purposes, use or allow others to use telephones to transmit, either interstate or within the District of Columbia, obscene or indecent messages to minors and nonconsenting adults. The letters were sent to the two sexually explicit message providers who did not appear to be restricting access by children. Complaints were filed by their parents. Under mandate from Congress, the FCC has tried several methods to control minor access -- mostly unsuccessfully. In 1984, the FCC required "Dial-a-Porn" operators to restrict operation to nighttime or pay by credit card. In 1985, they tried requiring access codes. Both were invalidated by the courts. In April 1987, scrambling was added to the list and the FCC required AT&T to advise customers in their telephone bills that a particular call was to an adult message service. Last May, two "Dial-a-Porn" operators were fined \$50,000 in Utah and all 38 of their lines throughout the country shut down.

● Thanks to the advent of cellular telephones, 150/450 MHz frequencies from the

NOVICE VOICE CLASS PACKAGE \$19.95 + \$2.00  
1 Hr. Novice Code Test Preparation Tape  
We have developed a complete Novice Package that  
enables an amateur radio operator to obtain a ham ticket without  
everything necessary to obtain a ham ticket without  
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P.O. Box 10111-N  
Dallas, Texas 75207



two-way private radiotelephone service will allow hundreds of thousands of rural households and businesses to have telephone service for the first time. On December 10th, the FCC established a new rural radio service known as BETRS — Basic Exchange Telecommunications Radio Service. BETRS will enable rural customers, whose remote locations make wiring them into the telephone network impractical, to have telephone service through a radio lashup. Fifty duplex VHF/UHF radio channels will supplement the existing Rural Radio Service which operates essentially as a standard 'old technology' radiotelephone.

- The November 1987 issue of "Communications", a professional mobile radio publication reports that the FCC has come to the relief of a Connecticut paging company that supposedly violated town ordinances regulating radio interference. Citing federal laws and a variety of court decisions, the Commission said it alone has the power to regulate radio interference problems. The FCC ruled that Wilton, Connecticut's local ordinances were null and void and "directly conflict with the Commission's rules and regulations ...by holding Mobilecomm to an independent standard for radio interference." The FCC said Wilton must look to the Commission for interference regulation.

- The FCC has issued a Notice of Proposed Rulemaking (FCC 87-367) looking toward expanding existing debt collection procedures to include those stemming from imposition of fines and forfeitures. The Debt Collection Act of 1982 already allows the withholding of money payable by the government to satisfy a debt the person owes the government, salary deduction from a federal employee and the use of private collection services in certain instances. The FCC invited comment on extending these procedures to unpaid administrative fines.

- The question still remains unresolved as to whether the federal government should develop a radio frequency radiation standard. The National Association of Broadcasters has urged the Environmental Protection Agency to adopt a national standard to eliminate the probability of state-by-state regulations. EPA action is still pending. The writing of EPA's

recommended radiation standards, which is to be completed by July 1989, has not yet begun. Any new adopted guidelines will not only affect broadcasting - but all radio services as well including amateur radio. Twenty-year EPA veteran, Richard A. Tell, 43, (and Extra Class K5UJU), former chief of the Electromagnetics Branch of the EPA resigned during late summer to start his own RF radiation consulting firm. A study of RF radiation levels conducted by Tell during early summer in Spokane, Washington, has yet to be released. Tell, the nation's top expert in the field of measurement and analysis of electromagnetic fields in the environment, reportedly climbed Spokane broadcast towers and measured RF induced currents in his own body.

- Whether the quality of broadcast signals carried on cable systems will remain in the federal domain will be decided by the Supreme Court. New York and several other cities have challenged a lower court ruling holding that technical standards for cable signal quality is preempted by the FCC. On December 1, the Supreme Court agreed to rule on cities' rights to set cable signal standards. A decision in the case, which could be far reaching, is expected by July.

- According to the Washington Times, more than half of all U.S. homes now have videocassette recorders. The EIA predicts that VEC penetration will increase to two-thirds by the end of the decade. Last year, revenues to movie studios from the home video market exceeded that of box office receipts for the first time. Nearly 80 million VCR's are now in the hands of the American consumer. The Motion Picture Association of America says that 10% of all videotapes sold or rented in the U.S. are illegal duplicates — many made by video shops needing additional rental copies. It is estimated that 40% of all Hollywood video movies marketed in Japan (where more than 70 raids took place in 1987) are pirate dupes. Japan has 15,000 video rental shops, the U.S. 30,000. Enforcement is difficult since police usually have more important crimes to deal with.

- A privacy invasion bill has been introduced in Congress by Rep. Alfred McCandless (R-Calif.) barring video stores from disclosing

a customer's taste in purchased/rented video cassettes. Stores that leak such information will be subject to a \$10,000 fine. Similar bills are pending in the District of Columbia and Maryland where attempts were made to obtain Judge Robert Bork's and Oliver North's movie rental records. Records of cassettes rented are usually kept by video stores in microcomputers. The Cable Communications Policy Act of 1984 prohibits cable operators from disclosing information about subscriber preferences in Pay-Per-View TV purchases, but the Act doesn't apply to rented videos.

● Piracy is also rampant in the music recording cassette tape business. A Los Angeles pirate operation was recently closed down that had the capability to make 300,000 counterfeit audio cassettes a week. Another Los Angeles man was recently arrested in Tucson when a Border Patrol officer discovered 18,000 pirate tapes and 30,000 counterfeit insert cards in a truck he was driving. Other illegal audio tape operations have been shut down in New York, Rochester and Houston.

● TV Answer, Inc. of McLean, Virginia, petitioned the FCC during early December for an allocation of 500 kHz from the 216-222 MHz band to implement a return radio circuit from TV set users to cable operators and/or broadcast stations via a hand-held remote control device. The 216-220 MHz segment is presently allocated to the Maritime Radio Service. (The FCC has already said that they plan to allocate the 220-222 MHz segment, presently used by ham operators to the Land Mobile Service.) The interactive radio/TV circuit has been in a preliminary testing phase in 1,000 Washington homes since June. Now TV Answer wants to expand that sample to 6,000. The return VHF radio circuit would be used primarily to order Pay-Per-View TV programming and various home shopping channel merchandise. Eventually the developer wants the technology used to conduct instantaneous nationwide and regional opinion sampling, political polls ...even by students to take examinations at home. The TV Answer System has the capability to digitally process one million viewer responses per minute with hardware that costs less than \$100.00. A massive campaign promoting the interactive radio/TV technology to cable operators is planned.

● Tele-Quest, an interactive TV game show is set to debut this March. Viewers call an "800" telephone number and pay \$3.50 a game (via credit card) to answer trivia questions. Twenty percent of the game entry "pot" goes for prizes. Cable stations get the game show free, plus advertising time and a 10% cut of the revenues. On-air contestants play the game simultaneously with cable viewers.

● The Louisiana legislature is allowing New Orleans cable subscribers to play Bingo for cash prizes. A viewer pays \$15 to play 100 games - a complete week's worth. Half the money goes to the winners, 20% each to charity and the city treasury ...with the remaining 10% to pay costs of running the games. Twenty games are played each night.

● In an apparent turnabout due to criticism leveled by its April 16th censorship of radio "shock jocks", the FCC has now ruled that broadcast indecent - but not obscene - material may only be aired in a "blue zone" after midnight and before 6 a.m. Obscenity is defined as appealing to the prurient interest. In effect, the FCC has more or less reversed itself and ruled that indecent material is indeed protected by the First Amendment.

● A Christmas greeting raced through IBM's internal electronic mail network last week and almost shut the system down. Someone wrote software that peeks into an employee's file and writes a Christmas message to each addressee listed. When the message arrives at the addressee it searches for their address list and writes more season's greetings. The E-mail system quickly overloaded.

● Bankrolled by Proctor and Gamble, Advanced Promotion Technology could make current supermarket scanning procedures antique. A video screen at the checkout counter advises shoppers of current promotions and generates selected coupons. No longer will manufacturers have to shower customers with product coupons. Shoppers pay for groceries by automatic APT debiting from their bank account - no checks or cash. Shoppers enter the system by inserting a personalized card that can direct promotions based on stored specific information about their buying habits and family demographics.