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BI-MONTHLY

REPORT

Fred Maia, W5YI, Editor, P.O. Box 10101, Dallas, TX 75207

★ *In This Issue* ★

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FCC Proposes Sweeping Changes to Ham Rules

No longer in the "vacuum tube age", Commissioner says

In a public meeting on March 24, the FCC decided to issue a **Notice of Proposed Rulemaking** (NPRM) to streamline and clarify §Part 97 of its rules governing Amateur Radio Service.

Special Services Division Chief **Robert McNamara** described the NPRM as an attempt to integrate present policy into the rules: "A lot of material originates from staff experiences, letters, questions, controversy, and established policy that becomes generally known — but not everybody knows — and it's not specifically stated in the rules."

For the most part, FCC staff do not consider the proposed changes to be substantive in nature, but rather to cut down on the "red tape" to the maximum extent possible. **Docket PR 88-139** is entitled "**Reorganization and Deregulation of Part 97 of the Rules Governing the Amateur Radio Service.**" The reorganization was expected, the deregulation was not. **John B. Johnston, W3BE**, Chief of the FCC's Personal Radio Branch, said that the deregulation was "more in terms of dropping out obsolete and repetitious rules" rather than in new regulations.

It was Johnston that rewrote the rules. He told us that it took him about a year to do it. Basically what he did was take §Part 97 and put it on a word processor. A new reorganized outline for the Table of Contents was developed and then existing paragraphs were moved into new headings. "We found a lot of duplications and started eliminating them. A lot of words were saved because you don't have to reintroduce the subject later in the rules," he said.

"Then we started a good thorough coordination process. Other people had suggestions they wanted. **Ralph (Haller, N4RH**, Chief, Private Radio Bureau) is a ham and he had a lot of personal involvement in it ..as did Ray (Kowalski, ex-Chief, Special Services Division) before he left. We are still 'cleaning it up' due to last minute changes. We hope to have it out by Dayton." Johnston is scheduled to address the HamVention and it appears his main subject will be the new §Part 97.

MARCH 24TH COMMISSIONER'S MEETING

Personal Radio Branch attorney John Borkowski delivered the formal presentation to Commissioners Dennis Patrick (chairman), James Quello, and Patricia Dennis.

(Borkowski:) "The item before you for consideration is a Notice of Proposed Rule-

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making to reorganize and deregulate the rules governing Part 97, the Amateur Radio Services. The Amateur Radio Services consist of the Amateur Service, the Amateur Satellite Service, and the Radio Amateur Civil Emergenc Service, known as RACES. The Amateur Service and Amateur Satellite Servioe are recognized internationally; RACES is unique to the United States."

This item proposes to reduce the total body of Amateur service rules by almost forty percent, by deleting those rules that are unnecessary, obsolete, or redundant. Just as important, this proposal would reorganize Part 97 to account for the tremendous advances in technology, and concomitant changes in operating practices, that are taking place in the Amateur Services."

"The current rules have not undergone a major reorganization since 1951. They have evolved one at a time, in response to the introduction of new technologies. They are based upon telegraphy and AM telephony operating practices. The proposed reorganized rules before you would more readily accomodate current and future technologies and operations. They will promote a regulatory environment that fosters maximum operator flexibility, and innovative technological uses and experimentation."

"In addition to these structural changes to the rules, the document before you does propose certain limited substantive changes. They are in the areas of permissible emission types, and codification of certain polices not currently specified in the rules."

When the Commission's rules were revised to incorporate the system of emission designators adopted by the Final Acts of the 1979 World Administrative Radio Conference, almost 1,300 possible designators replaced the previous system of fourteen designators used in Part 97. Because Amateur Radio is not a highly structured service, we recommend that this complex system of identifiers be replaced with nine terms that are already familiar to amateur operators. This will eliminate uncertainty, and promote flexibility and experimentation, by clarifying the wide range of emission types that are available."

"Additionally, the document before you would clarify the extent to which amateur stations may provide valuable and needed radio communications in support of community acitivities, without danger of violating the prohibition against business communications. Except where specifically noted, the new rules are intended to be consistent with the Commission's current rules and policies in the Amateur Services. We believe that this clarification and simplification of the Amateur Service rules will eliminate confusion and encourage compliance. We have included cross-reference tables from the current rules to the proposed rules and vice-versa, to assist the public in understanding and commenting on the new structure."

(Quello:) "It's very well written. The rules needed revision, and congratulations."

(Dennis:) "I think it's a badly needed reorganization. Obviously, we all recognize the important services that the Amateur Radio Service brings to this country, since they're such a strong part of an emergency system when natural disasters strike, and so on. I especially like that we are making explicit what has been heretofore implicit in operating practices. I think it's important to let people know specifically what the rules of the game are, and I applaud that part of the item as well. It recognizes that we're no longer in the vacuum tube age, and that was the early '50s, and we recognize that we're now in the solid-state micro-chip age."

(Patrick:) "These are the amateur's rules, we are at the NPRM stage, and we look forward to a dialogue with the Amateur Service as we move along to the final stages of this proceeding. We've had a great deal of tha dialogue heretofore. I hope that it will continue..."

(Dennis:) "They keep those letters coming..." (laughter)

(Patrick:) "Yes, in fact, we've had a lot of dialogue lately..." <Editor's Note: **Here the Commissioner's are undoubtedly referring to the large numbers of Congressional inquiries and letters pouring in from hams on the 220-MHz issue.**>

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER?

"I am a currently licensed Extra Class amateur radio operator and

(Dennis:) Lots and lots..."

(Patrick:) "...But, of course, we welcome it." (The item was adopted unanimously.)

INSIGHT INTO THE NEW PROPOSED PART 97

Borkowski, McNamara, Johnston, and Private Radio Bureau Deputy Chief Beverly Baker later elaborated on some of the details of the proposed rules. They emphasized that the document (which in draft form numbers some eighty-seven single spaced typewritten pages) has not yet been finalized for public release. The new rules will include statements of official policy on:

(1.) The exemption of so-called "swap nets" from the business communications prohibition. Basically the new rules will say that private individuals selling their personally owned equipment on the amateur air waves in a network format will be permitted.

(2.) How amateur stations may be operated in emergencies ...during during disasters and in cases involving safety of life and protection of property - or when the station is in distress. (Johnston:) "These rules are in there now, but they are not obvious ...they are back in the appendix with the International rules. These points have been moved up to the main body of Part 97."

(3.) How amateur station may be used in support of public gatherings.

(4.) The four-pronged test that must be met for amateur stations to transmit news information.

(5.) Frequency sharing. For the first time, the FCC proposes to state explicitly that amateur operators must share their frequencies by choosing the best available frequency, so as not to cause interference.

(6.) Clarification that station records are within the scope of an amateur station inspection.

(7.) Appending of self-assigned IDs to the FCC-assigned amateur callsign. Any identifiers may be appended, provided they don't conflict with current FCC-authorized identifiers or prefixes of other nations. Contest and packet stations often use such IDs after their regular call sign.

(8.) Clarification of rules on FCC imposition of quiet hours on an amateur station.

(9.) Removal of rule prohibiting an amateur from damaging another amateur's equipment. FCC believes hams should rely on local authorities in such situations.

(10.) Removal of rules instructing aliens on how to apply for a license. Rules duplicate instructions on application FCC Form 610.

(11.) Removal of space operation notification rules. Space operations will be directed to comply with International Telecommunication Union (ITU) regulations, from which amateur rules were derived.

(12.) New rules will allow amateur ATV stations to identify television transmissions in color as well as in monochrome.

(13.) Deletion of rules requiring retention and disposition of amateur examination papers in the volunteer examination systems. (Johnston:) "This is actually in recognition of "paperless" examinations that can be administered at a computer keyboard."

NEW PROPOSED EMISSION DESIGNATORS...

The NPRM also proposes to simplify the system of emission designators to be used in Amateur Radio. Johnston said he had considerable help on this from the ARRL's **Paul Rinaldo, W4RI,**(Editor of QST.) Rinaldo had previously authored an August 1987 working paper on **Designations of Emissions in the Amateur Service.**

"We had several meetings and exchanges of drafts. What we tried to do was to get a 'handle' on all of these ITU emission designators. We used to have just fourteen emission designators in the §Part 97 rules."

"When they implemented the changes that were agreed to at WARC-'79, we had to switch over to a system for all of our rules

using over a thousand different ITU recognized emission designators. That had the undesirable side effect of eliminating certain types of privileges that amateurs used to have. One of the most glaring concerned A1, Morse code. There are many different designators for CW ...such as telegraphy received by ear, CW received by machine, ...and so forth. You have all of these different designators covering various types of keyed telegraphy. It was never our intention of outlawing any of them. Unfortunatly the new designators had that effect since each is very specific."

"What Paul did, was come up with nine general emission terms that are already familiar to amateur operators and categorized all of the 1,300 ITU designators under those nine terms." They are:

(1.) **CW** = single-channel amplitude-shift-keyed telegraphy in International Morse Code for aural or automatic reception.
(2.) **MCW** = single channel modulated tone telegraphy emissions in International Morse Code for aural or automatic reception;
(3.) **PHONE** = telephony/voice emissions;
(4.) **IMAGE** = single channel emissions for television and facsimile, etc.;
(5.) **RTTY** = single channel emissions for narrow-band direct printing;
(6.) **DATA** = digital data including packet;
(7.) **PULSE** = pulse emissions;
(8.) **SS** = Spread Spectrum emissions; and
(9.) **TEST** = emissions containing no modulation or information used for on air transmitter adjustment, two-tone ampifier linearity testing, antenna measurement, direction finding, rang ing, etc."

"Amateurs have been having difficulty learning all of the new emissions. Now with just these nine terms, it should be easier."

Comments on Docket PR 88-139 will be due on or before August 31, 1988, with replies due on/before October 31, 1988. The document is not yet available, but should be in about two weeks. We plan to print and distribute the new rules - and (hopefully) will have them with us at Dayton. (Booth 475)

FCC APPROVES AMATEUR ATV REPEATER

Henry Ruh, KB9FO, of Des Plaines, Illinois, has been trying for over a year to obtain an ATV repeater pair from the local 450 MHz coordinator who apparently doesn't answer his mail. Ruh, who kept detailed records of his correspondence to the recognized coordinator, has now been given permission by the FCC's Chicago office to put his fast scan television repeater on the air anyway. The ATV repeater will be sponsored by the Peacock Amateur Radio Club.

We tried to telephone the Chicago area 450 coordinator, Al Crites/WA9ZZU, but he has no telephone listed at his 1988 call book address. Crites reportedly has resigned over the controversy and Ruh (along with others - one of which is a non-ham) has applied to coordinate the band. The Illinois Repeater Association (now affiliated with the Mid-America Repeater Council) apparently coordinates FM but not fast-scan television repeaters. Ruh said IRA only represents the views of "FM CBers that operate 450, 220 and 2 meters."

"The entire coordination process is a joke," Ruh said. "Nationwide, it is so mis-managed. There are no criteria. Coordinators make up rules as they go along. They don't follow the guidelines that the FCC has set down. Coordinators do not consider present and future band users - except the individual applicant that comes to them and any existing coordinated station. Frequencies are selected by 'whim' without regard to other people on the band utilizing other modes."

"The ham community has failed to address the major issues which arose when they decided to have recognized frequency coordinators. Coordinators have no legal authority and are generally picked by popularity. The answer is to select frequency coordinators and criteria to establish co-channel operations and sharing frequencies... Up until now it has been that one repeater owns the frequency and that may no longer be the only satisfactory answer. I think we need to do some innovative thinking. The interests of specialty mode band users, slow scan, packet, RTTY, ATV, etc, are frequently neglected..."

FEBRUARY VE PROGRAM STATISTICS....

February	1986	1987	1988
No. VEC's:	*76	*63	*62
No Testing Sessions:	282	304	449
	1986	1987	1988
ARRL:	49.3%	42.1%	45.2%
W5YI:	16.3%	28.9%	28.1%
DeVRY:	6.0%	5.6%	8.9%
CAVEC:	7.4%	5.6%	5.6%
Others:	21.0%	17.8%	12.2%
Year-to-Date Sessions:	548	592	702
No. Elements Admin.:	4451	4775	8391
	1986	1987	1988
ARRL:	53.5%	43.9%	50.7%
W5YI:	15.1%	18.6%	24.8%
CAVEC	5.6%	6.3%	7.3%
DeVRY	4.2%	3.4%	3.7%
Others:	21.6%	27.8%	13.5%
Year-to-Date Elements:	8718	8662	9161
No. Applicants Tested:	3025	3258	4817
	1986	1987	1988
ARRL:	51.7%	51.1%	46.8%
W5YI:	16.1%	18.8%	24.0%
CAVEC:	5.4%	5.6%	6.9%
DeVRY:	4.3%	3.7%	4.1%
Others:	22.5%	20.8%	18.2%
Year-to-Date Applic:	5970	6197	7416
Pass/Upgrade Rate, All:	61.7%	61.7%	60.7%
Pass/Upgrade Rate, W5YI:	64.1%	57.7%	53.5%
Applicants per Session:	10.7	10.7	10.7
Appl. per Session/W5YI:	9.6	8.3	10.9
No. Elements Per Appl./All:	1.5	1.5	1.7
No. Sessions Per VEC/All:	3.7	4.8	7.2

* = The FCC considers ARRL, W5YI, and DeVry to be 13 VEC's each since VEC's are appointed on a regional basis. The 13 regions are: Call sign districts 1 through Ø plus: Alaska (11) and Carribean (12) and Pacific Insular areas.(13)
[Source: FCC, Washington, D.C. 20554]

FEBRUARY AMATEUR LICENSING STATS

February	1986	1987	1988
First Time Amateurs:	1889	1889	1624
Novice Class Upgrades:	1078	1106	1002
Technician Upgrading:	342	329	303
General Class Upgrading:	414	355	239
Advanced Class Upgrading:	248	257	172
Total Amateurs Upgrading:	2082	2047	1716
Total Purged Fm Service*:	1603	714	693
Total Novices Dropped*:	1136	478	378
Total Novices Renewing:	379	381	376
Change/Ham Census/Month	+1586	+1200	+902
Month End Census:	418201	422082	433313

Extra	Advan.	Gen'l	Tech.	Novice	TOTAL:
(Feb. 1986)					
38931	98357	117407	84478	79028	418201
9.5%	23.5%	28.1%	20.2%	18.9%	
(Feb. 1987)					
41462	97727	115535	85913	81445	422082
9.8%	23.2%	27.4%	20.4%	19.3%	
(Feb. 1988)					
44205	98408	113949	94361	82390	433313
10.2%	22.7%	26.3%	21.8%	19.0%	

Club/Miltary/RACES Sta.	2731	2535	2385
Total Active Stations:	420932	424617	435698
Percent Increase:	1.7%	0.9%	2.6%

NOTE: *=Amateurs purged from service represents amateurs who have been deleted from the Master File. These amateurs did not renew their licenses. (Note the high number of Novice operators who do not renew!) The Master File is made up of active licensees plus amateurs who are still within the grace period for renewing without further testing. There are 474,770 amateurs in the total Master File.
[Source: FCC, Gettysburg, Pennsylvania.]

February Amateur Licenses Processed by FCC

1982	1983	1984	1985	1986	1987	1988
7480	13743	10979	10080	13480	10682	11379

The FCC has denied the petition of **Ben Johnson/NYØO** of Winfield, Iowa, requesting that the Morse code requirement be removed from the Novice and Technician Class making them a "no code" license. The FCC said ITU treaty obligations required that amateurs using telephony frequencies below 30 MHz be proficient in Morse code signals. The FCC referred to a 1983 FCC ruling that: "(1.) a 5 wpm telegraphy requirement does not constitute a significant barrier to the amateur service; (2.) knowledge of the international Morse code continues to be relevant to everyday usage; and (3.) a code requirement is important to maintaining the traditional public service role of the amateur service in emergencies involving public safety and the national defense. No data has been submitted to the Commission that would warrant a change in the telegraphy requirement."

HAM RESCUE SAGA ON THE HIGH SEAS

On Saturday, March 19th, **Bert Fageol, KV4AD**, of St. Thomas in the U.S. Virgin Islands, was on a 20 meter (14.188 MHz) network with a group of friends that he talks to daily. He heard a faint distress call.

A frenchman on a Liberian registered 6½-meter sailboat was in serious trouble. **Rivard Frederick, ELØRF**, was enroute from Guadeloupe in the West Indies to New York City when he encountered a severe storm off of the Jersey coast between Norfolk and Cape Cod.

A huge wave had hit the boat and caused it to barrel roll underneath the water ...ripping off the mast and cracking the hull in the process. The sailboat righted itself, but it was completely out of control. Waves were twelve to fourteen foot high around the vessel. The only long range radio on board was a ham rig that only operated on twenty. With a dipole antenna, reinstalled as best he could, ELØRF started frantically calling "Mayday" for help.

Florida ham, **Hank Luhrman, W4PZV**, who was on frequency with Bert, called the Miami Coast Guard who immediately transferred emergency control up to Norfolk, Virginia. Using the call sign "MNM", the Coast Guard at Norfolk came up on the twenty meter ham band ...it being was the only frequency that ELØRF could use. Hams gave the Coast Guard the bearing ELØRF reported, 37 North Latitude, 68 West Longitude. The Coast Guard joined the ham group.

A fixed wing aircraft, dispatched by the Coast Guard, located ELØRF shortly. When the aircraft was within range, Rivard (who obiously is a good navigator) was contacted on marine channel 16. Rescue operations were then initiated. A Japanese ship was in the area - although three or four hours away. The vessel was asked to go towards the site but was unable to help. The waves were very high and the freighter lacked rescue equipment.

A chopper was then dispatched from Falmouth in Cape Code to located and pick up the stranded ham mariner. Another freighter stood by to direct the helicopter. The chopper lifted Rivard out of the water about 6:30 that evening and his sailboat was towed to port.

The story has a happy ending - thanks to the able assistance of amateur radio operators operating on 14.188. Bert/KV4AD told us that there were many other hams in the group that kept the frequency clear and assisted by relaying communications. "I hesitate to give calls, because I might leave some out," he said.

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HAM RADIO VITAL TO ARCTIC EXPEDITION

The **Polar Bridge Expedition** began its more than three month cross-country ski journey across the North Pole on March 3rd. The skitrek is composed of a group of nine Russians and four Canadians — all licensed ham radio operators. They left Severnaya Zemlya in the Soviet northland bound for Canada's Ellesmere Island some 1,600 miles away. While some of the Soviet skiers are long time amateur radio operators - the Canadians had to be specially licensed.

They will ski over the top of the world, hopefully averaging some 16 miles per day. The journey over the ice from the Soviet Union to Canada has never been attempted before and is being closely followed in the Soviet Union with as much media coverage as the recently concluded winter Olympic games. They are due to arrive about the first week in June.

The purpose behind the arctic marathon is basically the same as the reason why climbers climb Mt. Everest. It is an obstacle to be conquered - man against the elements. Two of the skiers are medical doctors, one Soviet and one Canadian. They are conducting stress and medical studies. Geomagnetic scientific experiments are also being carried out. The expedition, however, is foremost an ultimate test of human endurance. The journey stops for two days during the twice a month air drops and it is during this period that the experiments are completed. The skitrek is also part of the Soviet Union's new posture of "glosnost" - openness.

All communications for the expedition are being handled by amateur radio. The trekkers get their position reports though a rather unique lashup of SARSAT/COSPAS, the search and rescue satellites, and the OSCAR 11/-UoSAT amateur satellite with its "talking computer." The skiers simply tune to 145.825 MHz FM and listen for the digitalker transmissions in plain English every 100 minutes as OSCAR-11 orbits overhead.

The main Canadian base amateur radio station, CI8C, is located at Resolute Bay on Cornwallis Island - about as far north as you can get. This station has a rotating team of Canadian ham operators operating in two week shifts. During the last six weeks of the expedition, Soviet amateurs will join the Canadians at Resolute Bay. CI8C is available on all ham bands for general ham contact when not engaged in expedition business. A special commemorative Canadian/Soviet expedition QSL card is available from: PO Box #313, Don Mills, Ontario, Canada, M3C 2S7.

The USSR main base ham station at Sridny Island, EXØCR, is currently manned by both Canadian and Russian amateurs since the skiers are still on the Soviet side. To facilitate amateur communications support, a historic special third party traffic and reciprocal operating agreement had to be negotiated between Canada and the USSR. It was the first such agreement ever signed between the USSR and any other nation. Canadian coordinator, Tom Atkins/VE3CDM told us that he was recently in Moscow and operated ham radio using his call "portable UA3." Amateur radio is providing the only communications except for VHF-AM between the skiers and their supply drop aircraft operating on aeronautical frequencies.

The skiers' daily routine consists of a steady eight to ten hour journey, followed by the setting up of their single tent, a meal together, a few minutes on the HF radio to the base stations and a well deserved night's rest. Moisture from breathing inside the tent immediately freezes and has been a problem. One of the Russian skiers has been successful at building igloos. These are now being used to sleep in at night and the condensation problem is reduced. Temperature ranges from minus twenty to minus forty-five degrees!

The skiers have been communicating on 80 meters using the Soviet call sign EXØVE. A message copied March 9th after one week on the ice said "frost bite was scarring most faces. Toes and fingers permanently numb and painful even when warm. A skier has blisters on his feet and is taking medication. Moisture is a big problem in tent, clothing and boots. No chance for drying clothes that are not being worn as they freeze instantly when taken off. Three pairs of Russian skis have broken and are being replaced with Canadian."

The skiers have three radio transceivers. The HF ham gear is a special Soviet custom-built solid-state 10-watt crystal controlled rig weighing only 2½ pounds. It operates on two frequencies each in the eighty, forty and twenty meter ham bands. Power is supplied by special lithium batteries that can withstand the severe cold.

The skiers also are carrying two handheld ICOM radios - one for position reports (2AT) and another VHF-AM (aircraft) radio. The ICOM radios are also patched into the lithium battery pack since nicads can't be used. The 50-ampere battery pack is about 14" X 4" X 4". A new one will be dropped to the skiers every two weeks - although the first one still had plenty of power left when replaced. There are three scheduled Soviet air supply drops on the USSR side of the North Pole and three on the Canadian side from Resolute Bay. The second Soviet drop is scheduled for this week.

The Canadian and Soviet base stations are required to listen three times every day. The skiers only have to complete one of those schedules at the discretion of the leader of the expedition. If the team is making good progress, they will not stop to make a routine radio contact. Their HF antenna is an inverted vee using ski poles as masts.

The morning routine includes a quick breakfast, tent take-down as they switch on their locator transmitter for the navigation fix during a satellite pass. At the request of the skiers, digitalker transmissions have been lengthened. The skiers passed the 250 mile

mark as of March 27th and are about half way to the pole. One of the major hazards is open water ...or "breaks" as they call them. Then they have to go around. There was one day when no forward progress was made at all due to the detour. They are now making excellent daily distance and are working together as a team.

The chemistry between the two different cultures seems to be working extremely well. Many of the Soviet skiers speak some English. Some Canadians speak a "smattering" of Russian. They seem to be communicating successfully. All radio communication to the skiers involve both Soviet and Canadian amateur operators. The base stations are communicating on the bottom end of twenty meters around 14.120 - 14.125 MHz. There seems to be no problem keeping these frequencies open for skitrek communications. Stations that attempt to break in are told that they will be put on a "black list" and will never be communicated with. This seems to be working out well.

The amateur radio communications has been termed a huge success. Everyone now knows that the amateur radio system - and the professionalism of the operators - is absolutely A+. The organizers of the expedition are absolutely thrilled with it. The Soviet march over the North Pole is something they have wanted to do for years. The USSR is very experienced at arctic exploration - far more than any nation in the west. The government of Canada agreed to it some eighteen months ago. The Canadian Radio Relay League was approached by the USSR Radiosports Federation to assist since CRRL is the IARU recognized representative of Canada.

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MOVE OVER DAT - HERE COMES DVCR!

Digital Audio Tape (DAT) technology has the music and electronics industry ...and Congress in a hot debate due to DAT's ability to make essentially perfect copies of audio recordings. "DAT has struck fear into the hearts of music industries throughout the world," the head of the Recording Industry Association of America (RIAA) told a Senate subcommittee.

According to the respected trade publication **Television Digest**, "Today's DAT wars look like a mere dress rehersal" compared to predicted battles over **Digital Video Cassette Recording** (DVCR), a consumer version of digital videotape machines marketed by Sony to commercial broadcast customers.

The major advantage of DVCR is the same as DAT; virtually perfect copies of videocassettes. Sony is believed to be well on the way to development of sophisticated data compression techniques necessary to get two or three hours recording time on a cassette. The technology could be ready within four years, but political battles over copyrights and standards make it impossible to estimate when DVCRs might be available to the consumer.

In an attempt to make DAT machines marketable while preventing consumers from making illegal copies of tapes, CBS records had invented a copy-protection scheme called "**Copycode**", which was supported by RIAA. The National Bureau of Standards tested Copycode and found it a flop. The system sometimes permits recording of "protected" audio cassettes and prevents recording of "unprotected" ones. It affects the quality (frequency response) of the music, according to NBS, and the agency even found five ways to defeat Copycode, none costing more than $100.

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FCC TO NIX ONLINE COMPUTER CHARGES

The FCC is likely to drop its proposal to add "access fees" to personal computer communications, according to wire service reports. Commission chairman Dennis Patrick has indicated to agency and capitol Hill sources that he will recommend that the controversial proposal be terminated. No formal announcement from the FCC has yet been released, but the agency is expected to officially drop the proposal within three months.

The Commission had proposed to end a temporary condition that exempted data communication networks from paying extra fees to telephone companies for use of the local telephone system. It believed that the fees

would represent a fairer distribution of the costs of telephone service. The FCC temporarily exempted the networks, however, because it thought that applying the fees would hurt the relatively new electronic mail and PC communication services such as CompuServe, the Source, GEnie, Unison and MCI Mail.

The FCC staff recently concluded that the exemption had lasted long enough. It proposed to introduce the fees, bringing howls of protest from tens of thousands of personal computer users, who flooded the FCC and Congress with letters of protest. Few organizations supported the fees, and even some telephone industry interests argued that the FCC's proposal would be impractical to enforce.

Patrick is said to have been persuaded to decline the fees because of the strong opposition and because of a new regulatory development known as Open Network Architecture (ONA) that will change the way Bell companies interface to computer service providers.

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BABY BELLS TO ENTER INFO BUSINESS

Federal Judge Harold Greene says U.S. telephone companies can now offer (but not originate) information services -- including electronic mail, data storage and voice recording. The ruling is a result of a civil action suit against the United States by the Western Electric Company, Inc.

Greene issued his order in a review of the line-of-business restrictions on the seven Regional Bell Telephone Companies ("Regional Holding Companies" or RHCs). The RHCs may enter voice as well as data "gateway" systems.

The Electronic White Pages, however, may be originated by telcos, but must be limited to a simple listing by name. There may be no earching capability, nor listing by business topics. A "help" capability or system is permissible, provided it is limited to helping consumers use the gateway, not the information services themselves.

RHCs may "host" (but not originate) the information of others, specifically they may "provide storage space in their gateways for databases created by others and lease that space to information service providers and end users." Voice messaging, voice storage and retrieval — and electronic mail are permitted.

Basically Greene's order now allows your telephone company to be the central pipeline for all sorts of data services. Future phone hardware is certain to have video readout options. Each provider will simply be a line on a CRT. It won't be long before you will be able to order pay-per-view cable TV offerings by punching a number on your phone or PC. Personal or business voice messages (which could make answering machines and services totally obsolete) will be stored in your "voicebox" for later recall.

Documents (electronic mail) will be sent anywhere across the U.S. "computer-to-computer" by accessing a single local phone number. Recorded voice messages on sports, stocks, restaurants, weather, news, travel — you name it — will be available through your friendly telephone company. Personal computer users will be able to tap into hundreds of different data banks. Long range, look for a "voice-to-hardcopy" (and vice versa) service that will aid the deaf and blind - and those that want written copies of their messages or orders. The Bell Systems already have many of their planned services ready to go!

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STRONG COMMENTS ON PART 15 REWRITE

The FCC's proposed rewrite of its rules governing unlicensed, low power communications devices is receiving opposition from SWLs, hams and a variety of industry organizations. At the same time, some manufacturers are looking to the revised rules as a way of increasing market share.

The ARRL argued that "the proposed changes would have an adverse impact on operations in the Amateur Service. Greater levels of interference, from an increased number of devices, would be experienced by amateur stations on frequencies from MF through UHF..." The ARRL said its concern over

consumer product RFI susceptibility to amateur signals was at least equal to, if not greater than, its interest in avoiding interference to amateur reception. The League strongly complained that the FCC proposed to remove "all references to amateur radio operation in residential areas" from its "cautionary note" to manufacturers in the rules.

"Not only has the Commission not asked manufacturers to incorporate RF shielding and filtering in the design of their products, as Congress authorized and encouraged more than five years ago," the ARRL said, "it has now proposed to eliminate even an advisory section of the rules which merely encouraged manufacturers to take residential amateur operation into account in frequency selection and otherwise in the design of the equipment."

The League was concerned about the possibility of increased authorization of low-power video transmitters, especially at 902-928 MHz. The proposal would "co-locate co-channel Part 15 devices and amateur stations in residential areas," the ARRL commented. "A greater error in spectrum management would be difficult to imagine, from the point of view of interference prevention."

Taking the other position on video transmiters was **Rabbit Systems, Inc.**, makers of a wire-based video distribution system for home users. The company obviously feels the pinch of competition from illegal wireless products. "Rabbit Systems, Inc. fully supports the Commission's proposal to designate the 902-928 MHz band for use by intentional radiators on an unlicensed basis. This rule change will substantially serve the public interest by creating lawful alternatives to numerous illegal and potentially harmful video transmitter devices now on the market." The company argued that amateurs have been "deterred" from using the band due to the high cost of equipment and interference from 915 MHz microwave ovens.

The Association of North American Radio Clubs (ANARC) - an SWL group - was "profoundly disturbed" by the Commission's proposal, presenting considerable technical documentation to support its argument that the proposed rules would ruin reception of international broadcasts. "(P)roliferation of household devices emitting higher levels of HF radiation will inevitably raise the RF noise floor, and increase the number and intensity of unwanted signals, particularly in densely populated areas," ANARC said.

The organization warned the FCC that the proposed rules would impose additional legal liabilities on receiver owners under the Electronic Communciations Act. "This could make the radio spectrum a 'mine field,' inasmuch as the receiver owner might not be able to distinguish a legally protected from an unprotected communication."

ANARC also said that "The burdensome new requirements proposed by the Commission are likely to reduce the number and variety of kits brought to market, and/or raise their cost to the public." ANARC felt that the rules would treat all electronic kits as technological 'vermin.'"

The group proposed an increase in power to 5 watts and increased spectrum for "lowfer" (non licensed low-frequency) operations. ANARC recommended that the lowfer band be expanded to 130-190 KHz from its present 160-190 KHz allocation in order to relieve crowding caused by ground-wave military transmissions. Lowfer operation is seeing a resurgence, with the availability of new commercial equipment for the band.

The Land Mobile Radio Section of the Electronic Industries Association (EIA) believes that "adoption of the proposal would drastically increase the potential for harmful interference to land mobile operation - particularly to police officers, firemen, ambulance crews and other pblic safety entities who often depend on portale radios for communbciation while in residential areas. Also, cellular operation and paging could be affected as more and more users employ portablicellular units and as these services gain additional market penetration... In essence, EIA/LMRS believes that any perceived benefit of allowing uncontrolled, non-licensed devices to proliferate throughout spectrum employed by public safety and other land mobile or cellular users is simply not worth the risk."