W5YI

Nation's Oldest Ham Radio Newsletter

REPORT

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★ *In This Issue* ★

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FCC Adopts Increased Regulatory and Processing Fees

The FCC issued their long-awaited *Report & Orde*r covering Regulatory and Application Fees on June 8th. Basically the FCC pretty much followed their earlier proposals - but there were some surprises! For one thing, it doesn't look like the FCC will be implementing their $105.00 Regulatory Fee on lifetime term commercial radio operator licenses anytime soon! They declined to adopt the proposals of their own staff!

The R&O implements a new Section 9 of the Communications Act which provides for the annual assessment and collection of regulatory fees. These fees are designed to recover the annual cost of FCC enforcement, policy, rulemaking and international activities as well as user information services. This section was ordered by the so-called Deficit Reduction Plan signed into law by President Clinton last August 10th. (The actual name of the legislation is the Omnibus Budget Reconciliation Act of 1993.)

In addition, the Commission has increased its Section 8 *Schedule of Processing Fees* to reflect a net change of 14.8 percent in the Consumer Price Index. The Communications Act requires the FCC to adjust its application fees every two years. The Commission had previously notified Congress of its new proposed fees and received no objections to the increases.

Basically the objective of the Section 8 and 9 fees is have spectrum and wireline telecommunications users pay for the cost of regulation and processing licenses (i.e. the FCC's annual budget) rather than having the cost borne by all taxpayers. This concept is part of the Clinton administration scheme of "reinventing government" by requiring beneficiaries of government services to pay the costs associated with their activities.

The new rules are designed to ensure that:

(1) fee collection does not adversely affect FCC regulatory activities;

(2) the most effective means possible are employed in the collection and deposit of fees, and;

(3) the amount of paperwork (and financial burden) on the public resulting from the collection process is kept to a minimum.

The *Schedule of Regulatory Fees* indicates which licensees are to be charged a regulatory fee. The FCC proposed to exempt government, non-profit, amateur radio licensees, non-commercial educational broadcasters and public safety services from cost of regulation charges.

The Schedule of Fees for FY-1994 calls for commercial radio operators, amateur "vanity" call signs, GMRS and aircraft and ship stations to be assessed an annual regulatory fee of $7.00.

Recreational boaters need a license!

Even recreational boaters who voluntarily install and use radio equipment aboard their small vessels will be subject to both Regulatory and

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Processing Fees. A person operating a 2-way radio aboard a pleasure craft - even one with just emergency VHF Channel 16 (156.8 MHz) capability - must pay a $115.00 license fee. ($70.00 for the 10-year term license plus $45.00 for processing the license.) The same fee applies to an aircraft station.

FCC Commissioner James Quello issued a separate statement saying he was "...concerned about the possible adverse effects of raising our regulatory fees for marine radios by recreational boaters. The problem is that the fees for the license term for these radios will exceed not only the cost of the average marine radio - thus discouraging recreational boaters from buying them - but also the amount of the forfeiture the FCC would likely impose for a first-time offender for use of a marine radio without a license. Human nature being what it is, I cannot help but agree with the Coast Guard and other marine experts who fear that under these circumstances a substantial number of boaters may choose either to forego installing a radio or getting a license..."

No Regulatory Fees for GROL!

No provision was made by Congress in the FY-1994 schedule for "lifetime" commercial radio operator license fees, however! And there are two of them: the Restricted Radiotelephone (RP) and the General Radiotelephone Operator License (GROL.)

The FCC staff had determined that a "lifetime" equals 15 years and the NPRM designated a $105.00 Regulatory fee (or 15 times the annual $7.00 rate.) In a surprising and totally unanticipated move, the Commissioners refused to go along with these recommendations on the basis that a Congressional Conference Report authorizes the FCC to review and adjust fees after one year.

The FCC Commissioners said they believed that "...Congress did not intend for us to make any changes to its Schedule of Fees for FY-1994, [therefore] we will not at this time assess fees on lifetime restricted radiotelephone and radio operator applicants and permittees."

Basically, what that means is that all Commercial Radio Operator licenses will carry a $7.00 per year annual regulatory fee - except the Restricted Permit (RP) and the General Radiotelephone Operator License (GROL.)

There is no examination requirement for the Restricted Permit. That license is required for (1) operation of aircraft and aeronautical ground stations, (2) marine radiotelephone stations aboard pleasure craft and to (3) operate, repair and maintain broadcast stations.

Even FCC seems to be confused!

The FCC released two license fee documents on June 8, 1994. One covered (Section 8) license **Processing Fees,** the other the (Section 9) license **Regulatory Fees.** These two items were considered in two different proceedings: General Docket 86-285 covered Processing Fees; MD (Office of Managing Director) Docket 94-19 addressed Regulatory Fees.

Strangely, one of the Orders (Docket 86-285) indicated that the Restricted Permit and the General Radiotelephone Operator License would indeed carry a $105 Regulatory Fee. (The RP carried an additional $45 Processing Fee. The GROL requires an examination and examination fee paid to the examiners - but no additional Processing Fee.)

On the other hand, MD Docket 94-19, concluded that Congress did not intend for the FCC to make any changes to its Schedule of Fees for FY-1994. Therefore, "...we will not access fees on lifetime restricted radiotelephone and [GROL] radio operator applicants and permittees."

The Commission said they would initiate a separate proceeding in connection with the assessment of fees for FY-1995. "We will seek in that proceeding comment concerning the allocation of costs of our enforcement, policy and rulemaking information services, and international services, including any necessary adjustments..."

We called the FCC in Gettysburg, PA to determine which version was correct. We were was told that there indeed would be no $105.00 Regulatory Fee on the RP and GROL ...at least until Fiscal Year 1995.

One can only speculate as to why Congress did not designate a fee for lifetime commercial radio operator licenses. Apparently they thought all licenses were issued for a specified number of years and tacked on a $7.00 per year cost of regulation charge.

What Fees will be charged? And when?

RADIO OPERATOR LICENSES

The following fees are due on all license and permit applications received by the Commission on or after July 18, 1994. The key word is "received!" **Even if an applicant passed an examination prior to this date, if the FCC receives it after July 18, 1994, it will be subject to a fee.** Applications received without fees after that date will be returned without action.

Note that each license application carrying a Regulatory or Processing Fee MUST be sent to a specific post office box located at the Mellon Bank in Pittsburgh, PA. It is very important that the appropriate "Fee Type Code" be entered on the application.

A check, bank draft or money order payable to

the FCC must be attached to the application. (The Commission also said it would accept payment by Visa or MasterCard credit card which also requires completion of FCC Form 159.)

Until further notice, GROL applications will continue to be sent to the FCC in Gettysburg, PA.

Restricted Permit:

License Term:	Lifetime of the Holder
Regulatory Fee:	None *(See Note 1)*
Processing Fee:	$45.00
Examination Fee:	None
FCC Form:	753
Fee Type Code:	PARR

Attach $45.00 check to application and send to:

Federal Communications Commission, RP
P.O. Box 358295
Pittsburgh, PA 15251-5295

(Note 1: The Regulatory Fee is waived pending Congressional and FCC approval of appropriate Regulatory Fee for a lifetime license.)

Marine Radio Operator Permit: (New)
3rd/2nd/1st Class Radiotelegraph: (New)
GMDSS Operator -and- Maintainer: (New)

License Term:	5 Years
Regulatory Fee:	$35.00 *(See Note 2)*
Examination Fee:	*(See Note 3)*
Processing Fee:	None
FCC Form:	756
Fee Type Code:	PACR

Attach $35.00 check to application and send to:

Federal Communications Commission
(FOB)
P.O. Box 358800
Pittsburgh, PA 15251-5800

(Note 2: The $35.00 Regulatory Fee is paid by separate check made out to the FCC and attached to the application. Note 3: The examination fee is assessed by and paid to the examiners. New licensees do NOT pay both an examination and a license processing fee.)

Marine Radio Operator Permit: (Renewal)
3rd/2nd/1st Class Radiotelegraph: (Renewal)
GMDSS Operator -and- Maintainer: (Renewal)

License Term:	5 Years
Regulatory Fee:	$35.00
Processing Fee:	$45.00
Total License Fee:	$80.00 (Single check)
FCC Form:	756
Fee Type Code:	PACS

Attach $80.00 check to application and send to:

Federal Communications Commission
(FOB)
P.O. Box 358805
Pittsburgh, PA 15251-5805

General Radiotelephone Operator License: (New)

License Term:	Lifetime of the Holder
Regulatory Fee:	None *(See Note 1)*
Examination Fee:	*(See Note 3)*
Processing Fee:	None
FCC Form:	756
Fee Type Code:	PACQ

Send application without any fee to:

Federal Communications Commission
1270 Fairfield Road
Gettysburg, PA 17325-7245

All Duplicate, and Replacement Licenses

Processing Fee:	$45.00
FCC Form:	Letter from applicant
Fee Type Code:	PADM

Attach $45.00 check to correspondence and send to:

Federal Communications Commission
(Duplicate)
P.O. Box 358305
Pittsburgh, PA 15251-5305

Amateur Vanity Call Sign: *(See Note 4)*

Regulatory Fee:	$70.00
FCC Form:	610-V
Fee Type Code:	PBAR

Attach $70.00 check to application and send to:

Federal Communications Commission
(Amateur)
P.O. Box 358830
Pittsburgh, PA 15251-5830

(Note 4: Fees for Vanity Call Signs will be assessed if proposed rules to establish vanity call signs become effective. FCC currently considering PR Docket 93-105. FCC Form 610-V is not yet available.)

SHARED USE SERVICES

General Mobile Radio Service (GMRS)

Regulatory Fee:	$35.00
Processing Fee:	$45.00
Total Fee:	$80.00 (Single check)
FCC Form:	574
Fee Type Code:	PALR

Attach $80.00 check to application and send to:

Federal Communications Commission
(GMRS)
P.O. Box 358230
Pittsburgh, PA 15251-5230

Aviation Radio Service (Aircraft Station):

Regulatory Fee:	$70.00
Processing Fee:	$45.00
Total Fee:	$115.00
FCC Form:	404

Fee Type Code: PAAR

Attach $115.00 check to application and send to:

Federal Communications Commission
(Aircraft)
P.O. Box 358280
Pittsburgh, PA 15251-5280

Maritime Radio Service (Ship Stations)

Regulatory Fee:	$70.00
Processing Fee:	$45.00
Total Fee:	$115.00
FCC Form:	506
Fee Type Code:	PASR

Attach $115.00 check to application and send to:

Federal Communications Commission
(Ship)
P.O. Box 358275
Pittsburgh, PA 15251-5275

Amateur Vanity Call Signs

The FCC said they were exempting amateur radio operators licensed under Part 97 from Regulatory Fees. "However, Congress included in the Schedule of Fees an annual regulatory fee covering vanity call signs. ...If our proposal (NPRM, PR Docket 93-105) to issue vanity call signs is adopted, we will assess a ($70.00) Regulatory Fee in FY-1994 upon persons filing applications..."

"The first 10-year fee must be paid at the time a request for a vanity call sign is made. If a requested vanity call-sign is not available or otherwise cannot be issued to the requestor, the regulatory fee will be refunded since amateurs are expressly exempt under the statute from regulatory fees, unless they have received their vanity call-sign."

"The American Radio Relay League, Inc., asserts that it has requested Congress to change the vanity call sign annual regulatory fee to a one time application fee. We, of course, will modify our fee schedule to be consistent with any congressional amendment of the fees."

FCC PROPOSES TEMPORARY CONDITIONAL OPERATING AUTHORITY FOR COMMERCIAL RADIO OPERATOR LICENSE APPLICANTS (PR DOCKET No. 94-58)
(News Bulletin, June 16, 1994, FCC, Washington, D.C.)

The Commission has proposed amending Part 13 of the rules to permit persons who have passed the examinations necessary to qualify for a commercial radio operator license, but have not yet received the license, to temporarily and conditionally perform the functions of a commercial radio operator. The Commission said the proposed rules should be viewed as yet another step in creating a government agency that works better and costs less.

A commercial radio operator license, certificate or permit (license) is required for persons who operate stations in a number of radio services. to qualify for certain of these licenses, an applicant must pass an examination that is administered by one of the nine Commission-certified Commercial Operator License Examination (COLE) Managers.

Within 10 days of completing an examination element, the COLE Manager must issue a Proof-of-Passing Certificate (PPC) to an examinee who scores a passing grade on an examination element. When the examinee is credited for all examination elements required for the commercial operator license sought, the examinee applies to the FCC for the license. The Com ission then processes the application and, if the applicant is fully qualified, grants the license. The Commission stated that the total processing time may be as much as eight weeks.

The Commission said because it is dedicated to providing better and friendlier service to its customers, it is proposing to provide temporary conditional operating authority to successful examinees upon properly filing an application with the FCC. This proposed temporary operating authority, however, would not apply to any person who has previously had a commercial radio operator license revoked, suspended, or is the subject of an ongoing suspension hearing. In addition, the proposed rules provide that the Commission, at its discretion, may cancel the temporary conditional operating authority without a hearing, if the need for such action arises.

With respect to log entries, the Commission proposed that commercial operators exercising temporary conditional operating authority would enter the PPC serial number and the date of issue in place of the FCC-issued license serial number and expiration date. Possession of the PPC document would activate the operating authority and would thereby serve in place of the license temporarily and conditionally. The Commission said this procedure would be verifiable and simple to implement.

Comments are invited on this proposal. Action by the Commission June 13, 1994, by *Notice of Proposed Rulemaking* (FCC 94-169)

AUTHORIZATION OF AUTOMATIC CONTROL FOR HF DIGITAL COMMUNICATIONS IN AMATEUR SERVICE PROPOSED - (PR DOCKET No. 94-59)
(News Bulletin, June 15, 1994, FCC, Washington, D.C.)

The Commision has proposed amending the Amateur Service rules to authorize automatic control of stations transmitting a digital emission on he High Frequency (HF) amateur service bands.

This action was requested in petitions filed by The American Radio Relay League, Inc. (ARRL), and the American Digital Radio society, Inc. (ADRS.)

The propagation characteristics of the HF bands allow for long distance communications. Amateur operators take advantage of these characteristics to communicate with other amateur stations all over the world. Establishing and maintaining a HF communications link, however, presents operating demands not encountered on the Very High Frequency (VHF) and higher frequency bands.

The variables affecting communications in the HF bands are highly complex. To maintain the communications link and avoid causing interference to the communications of other amateur stations, the control operator constantly monitors the activity on the channel being used and adjusts the station's transmitting parameters as needed.

Because the presence of the control operator has been necessary for proper operation in these systems, automatic control of an amateur station that is transmitting on any HF band or on the 160 meter MF (medium frequency) band has not been authorized.

In 1986, the Commission authorized automatic control of amateur stations transmitting digital communications on the VHF and higher frequency bands and indicated it was interested in authorizing automatic control of stations using the HF bands.

To determine solutions to the problem of avoiding interference from automatically controlled HF digital stations the ARRL conducted a successful feasibility project under special temporary authority the Commission granted to 50 amateur stations.

The ARRL's petition is based on the results of that study. The ADRS's petition contained an additional recommendation from amateur operators who have been experimenting for several decades with digital communications on the HF bands.

The Commission said it was gratified by the cooperation and dedication of organizations within the Amateur Service community in determining the conditions necessary to allow automatic control of stations transmitting data and RTTY (narrow-band direct printing) emission types on the HF Amateur Service bands. It agreed with the petitioners that automatic control of amateur stations in the HF bands can, with safeguards, make the transmission of data and RTTY emission types practical and effective.

Therefore, the Commission proposed to authorize automatic control for stations transmitting data and RTTY emission types on one specific subband of each HF band where such emissions are authorized.

It also proposed to authorize communications between a locally or remotely controlled station and an automatically controlled station on any frequency where data and RTTY emission types are otherwise authorized.

The Commission said that it firmly believes in the principle that government should be responsive to user needs. It noted that the rules it proposed were the result of a successful feasibility project planned and carried out within the Amateur Service community and represent the recommendations of two organizations dedicated to bringing the benefits to be derived from the transmission of digital communications on the Amateur Service bands to amateur operators in the United States and elsewhere without causing unnecessary interference to other types of communications.

Action by the Commission, June 13, 1994, by *Notice of Proposed Rulemaking* (FCC 94-171)

CANADIAN AMATEUR RADIO HF BAND PLAN PRESENTED "FOR DISCUSSION PURPOSES ONLY"

There are no subbands in Canada and any emission may be used on any frequency provided amateurs do not exceed a specified authorized bandwidth. Canada's national amateur radio society, *Radio Amateurs of Canada,* wants to nail down a voluntary Canadian HF band plan prior to September 1995 when Canada will host the Region 2 International Amateur Radio Union meeting at Niagara-on-the-Lake, Ontario. The Canadian position of HF frequencies will be presented at that time. Here is the initial RAC HF Band Plan.

160 Meter Band - 6 kHz Maximum bandwidth

1.800 to 1.840 MHz	CW and Digital modes
1.840 to 2.000 MHz	CW, SSB, SSTV and other wide band modes
1.830 to 1.840 MHz	DX Window

80 Meter Band - 6 kHz Maximum Bandwidth

3.500 to 3.580 MHz	CW Only
3.580 to 3.635 MHz	Digital Modes
3.620 to 3.635 MHz	Packet
3.635 to 3.725 MHz	CW
3.790 to 3.800 MHz	DX Window
3.725 to 4.000 MHz	SSB and other wide band modes

40 Meter Band - 6 kHz Maximum Bandwidth

7.000 to 7.035 MHz	CW Only
7.035 to 7.050 MHz	Digital Modes
7.040 to 7.050 MHz	International Packet
7.050 to 7.100 MHz	SSB
7.100 to 7.120 MHz	Packet within Region 2
7.120 to 7.300 MHz	CW and SSB

30 Meter Band - 1 kHz Maximum Bandwidth

10.100 to 10.130 MHz	CW Only
10.130 to 10.150 MHz	Digital Modes
10.140 to 10.150 MHz	Packet

20 Meter Band - 6 kHz Maximum Bandwidth

14.000 to 14.070 MHz	CW Only
14.070 to 14.095 MHz	Digital Mode
14.095 to 14.100 MHz	Packet
14.100 to 14.112 MHz	CW, SSB, packet shared
14.100 MHz	Beacons
14.225 to 14.235 MHz	SSTV
14.112 to 14.350 MHz	CW and SSB

17 Meter Band - 6 kHz Maximum Bandwidth

18.068 to 18.100 MHz	CW Only
18.100 to 18.105 MHz	Digital Modes
18.105 to 18.110 MHz	Packet
18.110 to 18.168 MHz	SSB and other wide band modes

15 Meter Band - 6 kHz Maximum Bandwidth

21.000 to 21.070 MHz	CW Only
21.070 to 21.125 MHz	Digital Modes
21.090 to 21.125 MHz	Packet
21.125 to 21.450 MHz	SSB and other wide band modes

12 Meter Band - 6 kHz Maximum Bandwidth

24.890 to 24.930 MHz	CW
24.920 to 24.925 MHz	Digital Modes
24.925 to 24.930 MHz	Packet
24.930 to 24.990 MHz	SSB and other wide band modes

10 Meter Band - 20 kHz Maximum Bandwidth

28.000 to 28.200 MHz	CW
28.070 to 28.120 MHz	Digital Modes
28.120 to 28.190 MHz	Packet
28.200 to 29.300 MHz	SSB
29.300 to 29.510 MHz	Satellite
29.510 to 29.700 MHz	SSB, FM and Repeaters

NEW MESSAGE FORWARDING RULES CALLED "UNWORKABLE" - RECONSIDERATION REQUESTED

Well known San Diego amateur, Phil Karn, KA9Q has submitted a *Petition for Reconsideration* to the FCC questioning the Commission's requirement that stations accepting packet messages into the network must either know the identity of the originating amateur or accept responsibility for the traffic. Here is the text of that Petition:

PETITION FOR RECONSIDERATION

Although the Commission's ruling is a welcome improvement over the previous state of affairs in which every station in a network of automatic message forwarders was held accountable for message content, it is nonetheless flawed and should be amended.

In particular, the requirement that the "first forwarding station" either authenticate the identity of the originating station or take responsibility for message content is unworkable. The Commission has implicitly assumed a specific architecture for the message forwarding system that is rapidly being overtaken by new systems that render the concept of "first forwarding station" largely meaningless. The present message forwarding network consists predominantly of "packet bulletin board systems" accessed interactively by end users with relatively simple stations. Many of these user stations are either wholly non-computerized (e.g., a "dumb terminal" connected directly to a Terminal Node Controller, or TNC) or use personal computers merely to emulate such a function.

Although this may indeed be the prevalent practice today, the increasing availability of substantial computer power to end users is causing the amateur packet radio network to evolve rapidly toward more capability at the user stations, with less in the network itself. This closely mirrors similar trends in non-amateur computer networks, particularly the Internet.

The Commission apparently did not consider these issues in its decision, hence the need for this petition for reconsideration.

Two examples make this clear: the rise of "personal BBSes" and the amateur TCP/IP network (TCP and IP are the core protocols of the Internet).

The personal BBS is just like a multi-user BBS, except that it is operated by and on behalf of only a single local user. In other words, the user and sysop are one and the same. Among the many advantages of the personal BBS is the immediate accessibility to the local user of messages previously received automatically by the BBS, as opposed to having to read them in real time across a slow and often congested packet channel.

Such a personal BBS, however, looks like any other BBS to the rest of the network; the other nodes in the network will relay its traffic just as if it were a "regular" BBS. Yet the Commission's ruling and its definition of "first forwarding station" appears to require every forwarding BBS in the network to treat such personal BBSes with special scrutiny that isn't required for other BBSes that simply forward traffic from other users. Indeed, the new rule seems to require that messages from the sysop on even a multi-user BBS be treated differently from messages from other users on that system.

Furthermore, consider the case where a personal BBS (or an end user with a "dumb terminal", for that matter) connects to another BBS via a digipeater, a low-level device that simply relays physical packets. This digipeater would apparently become the "first forwarding system" and would therefore have to take responsibility for the content of the traffic it relays, even though it would not have to do so for traffic already relayed by another digipeater or BBS. This is clearly unworkable.

The TCP/IP network shows even more clearly the trend toward removing higher-level functions from the network itself and pushing them toward the "edges" of the network. In a TCP/IP network, every user system provides functions analogous to the BBS, only much more sophisticated. Besides conventional BBS functions, these systems often provide file repositories and remote access to computing facilities such as UNIX systems. Many more sophisticated applications, borrowed from the Internet as a whole, are also appearing: graphical user interfaces, powerful resource search and query tools, and so on.

However, the lower level functions in the TCP/IP protocol suite performed at intermediate systems are deliberately

very simple; indeed, an IP router (packet switch) is conceptually similar to (and almost as simple as) the digipeater. It is important to understand that in a TCP/IP network, all of the nodes between two end user stations (e.g., a user and a server node) are these low-level IP packet routers, and the end-to-end communications they support are real-time in nature. Furthermore, the protocols allow consecutive packets between the same end points to travel through different links and routers; the only reliable place to monitor the traffic between any pair of end points is at the end points themselves. Real-time auditing and approval of each packet is simply not practical.

However, the wording of this present Order implies that the control operator of the first IP router forwarding traffic from an end user must either authenticate that user or take responsibility for the end user's traffic, even though the same router could confidently carry traffic that had already been forwarded by another router. This discrimination is wholly impractical and unacceptable; it may even be impossible.

Ideally, the Commission ought to abandon all references to the "first forwarding station" and place all responsibility for message content on the originating station, which can be clearly defined as the station that first transmits the message on amateur channels. Any amateur station that relays or forwards traffic already transmitted and received on amateur frequencies, be it a repeater, digipeater, BBS, IP packet router or anything else, would not be held accountable for the content of the communication.

As a possible alternative, I would be satisfied with a Commission interpretation of its ruling holding that the distinction between the "originating station" and "first forwarding station" applies only in the special case of a high level intermediate system such as a public BBS that speaks to "dumb terminals" on the user side and speaks BBS network protocols to the rest of the network.

In the case of an end user system that speaks the network protocols directly (be they the BBS message forwarding protocols, TCP/IP or anything else) the originating station and the first forwarding station should be considered the same entity. Which in fact they are, since the originating station uses the same forwarding protocols as the rest of the network.

I am gratified that the Commission has seen fit to grant partial relief to the rules that have so severely burdened the development of packet radio. However, I am concerned that the changes do not go nearly far enough, and I urge the Commission to reconsider its decision.

I understand that the Commission strongly prefers to establish principles of broad applicability that do not have to be constantly revisited as amateur technology and practice evolve. However, this ruling has clearly violated that principle by assuming a specific architecture for the amateur packet radio network that does not accommodate even near term future trends. I urge the Commission to rectify its oversight so that it does not have to revisit this issue again in the near future.

Respectfully submitted,
Phil Karn, KA9Q
7431 Teasdale Ave.
San Diego, CA 92122

BROADBAND PCS SPECTRUM TO BE AUCTIONED

The FCC has approved a revised plan to auction off more than 2000 broadband PCS (Personal Communications Service) channels later on this year. The new plan was developed by an intra-agency task force headed by Private Radio Bureau head, Ralph Haller (who, by the way, is also an Extra Class ham!)

PCS has been described as a low-cost cellular telephone service. But new technologies such as multi-channel wireless phones, wireless facsimile transmission machines, computer data transfer and two-way paging are also on the horizon.

The spectrum auction is expected to raise more than $10 billion for the U.S. treasury. Potential bidders have to ante up $350,000 just to participate in the bidding. The opening round minimum bid is $500,000 per license. Some companies will spend more than $1 billion for their broadband licenses!

To foster competition, no single bidder will be allowed to buy more than 40 MHz of spectrum in a single market. And cellular telephone companies are limited to 10 MHz in territories where they provide service to prevent the cellular industry from dominating PCS. Certain groups of people (women, minorities, small business owners and rural telephone companies) will be given bidding advantages.

The revised plan calls for the 1850 to 1990 MHz band to be chopped up into 10 MHz and 30 MHz wide licenses - each covering one of 51 Major Trading Areas (MTAs) and 493 smaller Basic Trading Areas (BTAs) located across the United States. Each market gets six licenses.

The spectrum blocks will be located in the same band - rather than in two smaller band segments as originally planned. (120 MHz is being allocated to licensed PCS service; 20 MHz - 1910 to 1930 MHz - for unlicensed wireless voice and data applications.)

The single band concept is expected to result in 25% lower equipment costs and cheaper prices for consumers. The revised plan is largely based on a proposal by Motorola, the nations largest manufacturer of cellular and PCS telephones.

PCS will eventually be a $100 billion industry and compete with traditional landline and cellular phone service. The actual spectrum auction is expected to take place at the end of the year.

In an related development, Motorola says the anticipated noise levels in the 2402-2417 MHz band from microwave ovens and other ISM (industrial, scientific and medical) devices makes the spectrum largely unusable for wide-area mobile communications services. The spectrum is part of the 200 MHz that the U.S. government will eventually be turning over to the private sector. (This government band is currently shared with the Amateur Service.)

AMATEUR RADIO CALL SIGNS

...issued as of the first of June 1994:

Radio District	Gp."A" Extra	Gp."B" Advan.	Gp."C" Tech/Gen	Gp."D" Novice
Ø (*)	AAØRB	KGØNH	(***)	KBØMXY
1 (*)	AA1JE	KD1VA	N1RYS	KB1BIA
2 (*)	AA2SH	KF2VK	N2YYZ	KB2QZD
3 (*)	AA3HV	KE3NE	N3SBK	KB3BCD
4 (*)	AD4SJ	KR4SZ	(***)	KE4MHX
5 (*)	AB5UM	KJ5XX	(***)	KC5GWN
6 (*)	AC6CM	KO6CP	(***)	KE6HQM
7 (*)	AB7CN	KI7YS	(***)	KC7CQR
8 (*)	AA8OX	KG8JB	(***)	KB8STD
9 (*)	AA9KX	KF9VT	N9XAD	KB9IYE
N.Mariana Is.	KHØD	AHØAS	KHØCR	WHØAAY
Guam	WH2D	AH2CU	KH2JL	WH2ANK
Johnston Is.	AH3D	AH3AD	KH3AG	WH3AAG
Midway Is.		AH4AB	KH4AG	WH4AAH
Hawaii	(**)	AH6NG	WH6UQ	WH6CRG
Kure Is.			KH7AA	
Amer. Samoa	AH8J	AH8AG	KH8BF	WH8ABB
Wake W.Peale	AH9C	AH9AD	KH9AE	WH9AAI
Alaska	(**)	AL7PQ	WL7SN	WL7CHQ
Virgin Is.	WP2N	KP2CC	NP2HM	WP2AHU
Puerto Rico	(**)	KP4WU	(***)	WP4MPE

CALL SIGN WATCH: *=All 2-by-1 "W" prefixed call signs have been assigned in all radio districts.
**=All Group A (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico.
***=Group "C" (N-by-3) call sign formats have now run out in all but the 1st, 2nd, 3rd and 9th call sign areas.

[Source: FCC, Gettysburg, Pennsylvania]

• **We have noted "NO GROWTH" in the number of ham operators this year.** Here are the year-to-date (Y-T-D) figures:

Census of Active Amateurs - Total all classes:

Year	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	Y-T-D Increase
1994	631598	631726	631042	630347	630531	(1067)
1993	587657	594809	596225	600445	603717	+16060
1992	543117	547139	551198	555989	561197	+18080
1991	500243	502133	504360	507083	512918	+12657

First Time Amateurs - Total all classes:

Year	Jan.	Feb.	March	April	Total	
1994	2398	2589	3010	1773	9770	Very Low!
1993	4728	3880	4239	3290	16137	
1992	4030	4092	4806	5215	18142	
1991	1816	2162	2656	5749	12383	

Although the number of new amateurs are down, the primary answer: **Failure to renew!** Ten year term ham tickets started in 1984 and in 1994 began coming up for renewal. And only 38% of these tickets are being continued. **For the first 3 months of 1994, 12,823 amateurs failed to extend their ticket.** (Many are Silent Keys.) 7982 renewals this year **(out of 20805 eligible.)**

APRIL AMATEUR LICENSING STATISTICS

April	1991	1992	1993	1994
New Amateurs:				
New Novices	2651	1330	944	97
New Tech's	3025	3870	2296	1650
Total New:	*5749*	*5215*	*3290*	*1773*
Upgrading:				
Novices	1621	889	472	172
Technicians	*772	*749	*523	*298
Generals	500	488	335	190
Advanced	346	315	240	116
Total:	*3239*	*2441*	*1570*	*776*
Renewals:				
Total Renew:	86	62	195	1938
Novices	5	6	16	246
Purged:				
Total Dropped:	16	7	18	14
Novices	2	0	1	1
Census:				
Indiv. Oper.	*512918*	*561197*	*603717*	*630531*
Change/Year	+55549	+48279	+42520	+26814

Individual Operators by Class: *(and % of total)*

Extra	Advan.	General	Technic.	Novice	Total:
April 1991 (End of month statistics)					
54887	106075	120800	134655	96501	*512918*
10.7%	20.7%	23.5%	26.3%	18.8%	100.0%
April 1992					
58913	108575	123543	171803	98363	*561157*
10.5%	19.4%	22.0%	30.6%	17.5%	100.0%
April 1993					
62669	110825	126168	203873	100183	*603717*
10.4%	18.3%	20.9%	33.8%	16.6%	100.0%
April 1994					
65692	111513	124822	233799	94705	*630531*
10.4%	17.7%	19.8%	37.1%	15.0%	100.0%

Club/ RACES & Military:	(1991)	(1992)	(1993)	(1994)
	2432	2431	2431	2344
Total Active:	**515350**	**563628**	**606148**	**632875**
% Increase	+12.1	+9.4%	+7.5%	+4.4%

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

AMATEURS BY CALL SIGN GROUP:

Group	Extra	Advan.	General	Technic.	Novice	Total
A	36900	652	231	7	0	37790
B	4550	30257	51	6	1	34865
C	15100	43818	66374	99261	39	224592
D	9138	36786	58166	134525	94665	333280
Other	4	0	0	0	0	4
Total	**65692**	**111513**	**124822**	**233799**	**94705**	**630531**

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

[Source: FCC Licensing Facility, Gettysburg, PA]

ANNUAL VEC CONFERENCE HELD IN GETTYSBURG

Volunteer Examiner Coordinators representing nearly all ham operator license examinations administered in the Amateur Service met on June 23 and 24 in Gettysburg, PA at their annual conference.

FCC's Larry Weikert escorted all VEC's of the FCC Gettysburg licensing facility and demonstrated the new amateur radio computer system that is just now coming on line. The FCC's 27 year old Honeywell mainframe computer is due to be turned off for the last time on September 1, 1994. In its place will be a new PC-based amateur data processing system.

All VEC's saw amateur radio applications being keyed into a PC and the license document automatically printed on a Xerox laser printer. The license is then machine folded, inserted into an envelope and postage applied on a mailing equipment assembly line. The whole operation takes place very quickly. "Tech Plus" licenses are also being issued for the first time.

The most labor intensive part of the license issuing operation is in manually keying in the application data. The FCC simply does not have enough people to handle this function quickly. There were cartons and piles of amateur radio applications everywhere ...thousands of them! It was easy to understand why it is taking up to three months *after* the FCC receives an application for an applicant to be mailed a new or upgraded ticket. Everything seems to be fully automated ...except the keying in of the Form 610 data.

VEC Meeting

The Thursday afternoon working group meeting included a report by the VEC's Question Pool Committee. WCARS-VEC Ray Adams, N4BAQ (QPC Chairman) discussed the current status of the new Advanced Class (Element 4A) question pool which is being worked on now by the QPC. Release is scheduled to the public on December 1, 1994.

ARRL's Bart Jahnke, KB9NM led an excellent discussion on identifying and addressing examination cheating. All written and code examinations should be changed frequently and VEs should be on the lookout for altered CSCE's (passing certificates) and license copies. A discussion followed on taking action on identified cases.

The greater amount of Thursday afternoon was spent in discussing the VEC Instructions ...an internally produced set of guidelines under which the VEC System operates. This discussion was led by R.C. Smith, W6RZA. Several revisions were made ...some significant, but most housekeeping in nature. A procedure was adopted for examinations in foreign languages.

A statement was added to the instructions re-stating the long standing policy that "A VEC may invalidate a test session and disaccredit Volunteer Examiners. VECs may require VEs to agree to this policy. A VEC may refuse to coordinate a test session." The VEC Instructions are approved by the FCC before implementation. A motion was also made and carried to petition the FCC to add the following line to the Part 97 rules: "VECs are obligated to follow the latest version of the instructions."

FCC Officials Address Conference

The following day's meeting was more formal since it is attended by numerous FCC officials. The Washington DC FCC contingent consisted of Ralph Haller, Bureau Chief; Bob McNamara, Division Chief, John B. Johnston, Chief, Personal Radio Branch and his assistant: Bill Cross. Attorney Monty DePont also attended. Walt Boswell, Larry Weikert, Darlene Reeder, Judy Dunlap and Betsy Miller were on hand from the FCC Gettysburg licensing facility.

Johnny Johnston, whose Personal Radio Branch supervises the Amateur Service addressed the VEC Conference for about an hour. Here are the highlights:

(1.) **Privatized Commercial Radio Operator examinations** are now underway and running smoothly. About 9,000 examinations have been administered. "Much of the praise [for its success] belongs to you VECs. You have been trailblazers in privatized radio license examination systems."

(2.) The FCC has oversight responsibility for the VEC System. Since the VEC System has completed its first decade of operation, the **FCC initiated its first financial inquiry of the VEC System.**

"The Office of Inspector General is charged with seeing that all activities within the FCC are in full compliance with the statutes and the rules. You can anticipate that sooner or later that office will be looking into the VEC System and evaluating whether it is in compliance."

"The VEC System determines who is, and who is not, qualified for a Government license. That alone is enough to attract the attention of the investigators. Moreover, there are complaints of widespread cheating. ...Money is another thing that attracts the attention of the investigators. And the VEC System involves money. And the collection of money is subject to the law."

(3.) For the 1993 Financial Inquiry, the **three most active VECs and their ten most active VEs were asked to respond** to certain funding and conflict-of-interest questions. "...we had hoped to have this Inquiry wrapped up by now, but it is still in progress."

(4.) Johnston then discussed the **problem of examination cheating and failure to comply with the rules.** He told how one VE actually assumed the identity of a long deceased amateur "...to provide a third VE to certify test results for applicants who were not even present. The Contact VE for that team has surrendered his amateur station and operating license. We have cancelled those licenses and have rescinded the grants of twenty-four licenses to persons whose test results were certified by this long dead VE."

In Kansas, a Technician Class licensee has had his operator license suspended for one year for attempting to bribe a VEC.

There was evidence at 25 California sessions that

applicants were given prior access to the code test message. Twenty examinees had their test results invalidated and 59 persons were ordered to retest under a different VEC. So far, only three have retested successfully.

On two occasions, the same VE reportedly administered examinations at two different sessions on the same day, travelling as much as 70 miles one-way between the sessions. The FCC has determined that apparently one of the test sessions never took place and at the second session, only seven people were examined rather than the 22 reported by the VEs.

Johnston asked that VECs share information on how to protect themselves against cheating and scams.

(5.) One petitioner even wants persons **over the age of 65 to be excused from the 13 and 20 wpm code exams.** The current license structure is the result of some six major rule makings over the past 45 years that have produced several thousands of comments. "...in view of the very busy FCC agenda for cable regulation, PCS, the information superhighway, etc., it will take a very convincing argument to show the Commissioners that yet another rule making for amateur operator license classes is needed."

(6.) The possible adoption of **CEPT and CITEL international licensing could lead to a possible simplification of our own license structure.** *(See June 15th Report.)* Twenty-two European countries recognize each others amateur license for temporary operation in their country. A similar situation could exist in certain North, Central and South American countries.

The CEPT (European) arrangement is based on a two class license structure. Class 1 requires telegraphy skill, Class 2 does not. The CITEL (Inter-American) approach is an International Amateur Radio Permit modeled after the International Driver's Permit. It is also based on a two-class system. "That appears to be the trend internationally."

(7.) The **"Vanity" call sign proposal** was prompted by new legislation that specifies an annual $7 per year regulatory fee. "A Report and Order on Vanity call signs has not yet been adopted, ...but it is on the fast track."

(8.) A proposal by the ARRL "...wants to **encourage former hams who have dropped out of ham radio to return by allowing them to become re-licensed without re-passing your exams."** It would be very time consuming for Gettysburg to examine old documents to determine previously licensed amateurs. "Maybe the VEC system could make it possible to attain the ARRL's objectives. Possibly the VEs would examine [various] documents and give appropriate examination credit to these former licensees."

(9.) The Western Carolina VEC filed a petition requesting that the **FCC recognize in the rules the widespread practice of having a VE team supervisor.** The ARRL has opposed this proposal.

(10.) "...there is **no requirement in Part 97 for the administering VEs to certify that they personally had administered the exams.** That leaves only your instructions to your VEs. If you want your same VEs who administer the examinations to sign the certification, you will have to impose that requirement."

(11.) **"There is no such license class as Tech Plus.** Rule making would be necessary to make a Technician Plus license class. If you do want a Tech Plus class of license, we will need a strong case for doing so. We don't exactly relish the thought of trying to explain to the Commissioners why a class of license is needed just for Technicians who have passed a slow-speed telegraphy test. Nor would a sixth class be consistent with the 'two class' CEPT and CITEL systems that we'll be taking to them for approval. For as long as I've been at the FCC, I don't remember us even having a new Commissioner who even knew that telegraphy was still used anywhere."

(12.) A series of graphs were displayed on a screen showing that the **number of new Novice Class licensees has dropped dramatically,** especially during the past year after Novice exams were transferred to the VEC System. The greatest number of Novice applicants are aged 11 to 16. And there are more amateurs upgrading to license classes that require telegraphy than before the codeless technician!

Another chart indicated the number of VE sessions to be 12% ahead of last year. "I'm projecting the VEC system to finish 1994 having served 112,000 examinees," Johnston said. The number of applicants per session has dropped to about 10 per session ...from 12.7 in 1991. The average pass rate is holding steady at 65%.

(13.) **Late filing of amateur applications by VECs is getting worse.** Electronic filing will reduce the keystroke delay in Gettysburg. "We would like to know which rules in Part 97 will need to be changed in order for you to bring electronic filing on line as soon as possible."

Remarks by Private Radio Bureau Chief

Bureau Chief, Ralph Haller, congratulated the VECs for a very successful year. He said that the Commercial Radio Operator testing program was modelled after the VEC System.

He briefly discussed his role in chairing a PCS (Personal Communications Service) task force and the upcoming spectrum auctions. The Private Radio Bureau hopes to be able to hire 40 to 50 more people. The FCC is the only federal agency that is growing ...as is telecommunications in general.

Haller said the amateur license backlog is caused by the delay in keying applications. He stressed the importance of electronic filing and getting it implemented quickly. "The speed-of-service will be in hours instead of weeks. Instant temporary licensing may not be necessary. We hope to send out the license the same day." Haller said the FCC may be able to eliminate the need for an applicant to have a license document 'in hand' before beginning operation. A computer bulletin board could be accessed by an applicant to indicate that a license has been granted.

Gettysburg's Judy Dunlap briefly discussed the progress on electronic filing. Input software will be provided to all VECs. No decision has yet been made on what VECs should do with Form 610s once their applications have been filed electronically. There is a real concern about errors on electronically filed applications. Larry Weikert discussed the proper handling of applications, attachments and examination reports. New and renewed amateur radio applications will carry a new ten year term. Modified licenses (including upgrading to a new class) will now carry the original expiration date.