

W5YI

Nation's Oldest Ham Radio Newsletter

REPORT

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

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March 15, 1993

Unlicensed Ham Operator Heading Back to Prison

The only amateur radio operator ever to be imprisoned for illegally transmitting on ham radio is headed back to the pokey. Richard A. Burton, 48, of Harbor City, California, was sentenced to prison on Monday, February 22nd, for talking on his 2-meter radio without a license. He used to be WB6JAC.

Burton has a long history of repeated amateur radio violations going back more than a decade. The FCC initially revoked Burton's ham ticket in 1981. But that didn't keep him off the amateur air waves. A 1984 federal court found him guilty of transmitting on the ham bands without a license on three separate occasions ...and using obscene language.

The obscenity charge was later overturned but the license revocation continued. He was sentenced to a four year federal prison sentence which was later reduced to 6 months to be followed by a 5 year probationary period. He served the sentence at the Lompoc (California) federal detention facility; the probation was over in 1989. In 1990, Burton was once again monitored on the 2-meter band and convicted of operating without a license. This time he was ordered to undergo therapy.

The following year, Burton applied to become a legally licensed radio amateur and the

FCC designated the application for a hearing. They wanted to know in view of his past enforcement record whether granting the ham license "...would serve the public interest, convenience and necessity."

The FCC dismissed Burton's amateur radio license application when he failed to respond to the hearing notice within 30 days as directed. Burton later appealed to the FCC Review Board but the judge agreed with the Private Radio Bureau that he should not be issued a ham ticket based.

Last summer, Burton was again cited for making several illegal unidentified 2-meter ham radio transmissions after the Los Angeles FCC Office tracked his broadcasts to a Redondo Beach address. He pleaded innocent and was ordered to return to federal district court for jury trial last November.

On Dec. 1, 1993, Richard Burton was convicted on all four counts of operating an amateur radio station without a license. This was his third conviction. He could have received up to a 2 year prison sentence and a \$10,000 fine.

Last month, Burton was sentenced to a seven month prison sentence by U.S. District Judge, Ronald S. W. Lew. A write-up in the Feb.

23rd Los Angeles Times newspaper contained the following unusual account:

"Burton, 48, has contended that the FCC crackdown came after former President Ronald Reagan heard a tape-recording of one of his raunchy transmissions after a Bel-Air church service. 'I blame Ronald Reagan. I think he said something and the FCC took it as a presidential order,' Burton said Monday. 'When Bush was pardoning everybody, he should have pardoned me.' Reagan said last year that he had no recollection of the church incident. FCC officials have denied being pressured by the White House."

After the prison sentence, Burton must undergo psychological counseling and perform 500 hours of community service. Los Angeles Times writer, Bob Pool, quoted Burton as saying, "I think I need to get myself another hobby."

HAM LICENSE RESTRUCTURING PETITION DENIED

William C. Wells, WA8HSU, of Logansport, Indiana, has had his Petition for Rulemaking denied and dismissed by the FCC. Bill Wells, who filed his petition last September, wanted the Commission to reduce the number of amateur radio license classes from five to three. Only the Novice, Technician and General Classes would remain. "Licensees currently holding the Advanced and Amateur Extra Class would be allowed to retain their license class although with no additional privileges above General Class."

Wells suggested that the three ham classes be granted by passing one or more of four examination elements. (There are currently 8 different examination elements in the Amateur Service.)

- Element 1 - 5 words-per-minute telegraphy,
- Element 2 - Rules and regulations (35 questions),
- Element 3 - Safety (25 questions); and,
- Element 4 - Technical topics (40 questions from the current Element 2 and 3).

Novices would be required to pass Elements 1, 2 and 3, Technicians: Elements 2, 3 and 4 and General Class: Elements 1, 2, 3 and 4.

Wells said Novices should be authorized (200 watt) voice and code privileges on 160 and 10 meters, telegraphy only on 80, 40 and 15 meters and (25 watt) privileges on 6, 2, 1 1/4 meters and 23 cm.

Technicians would receive all emissions and modes above 30 MHz at full amateur power with General Class licensees obtaining all amateur privileges.

All Amateur Service licenses would be issued for the life of the holder. Wells also felt that all band plans mandated by Commission Rules below 30 MHz should be eliminated "...except narrow bandwidth

modes will be required in the 30 meter band."

Wells, an Extra Class amateur, argues that his "petition remedies the injustice done to the General Class licensees who had earned privileges taken away as a result of the American Radio Relay League supported *Incentive Licensing Program* of the late 1960's. He also said the ARRL should be disqualified from any comment on his petition due to their vested interest in the present system. Wells believes the League derives more income from publication sales than from member dues.

Only the 5 words-per-minute telegraphy requirement would remain. Wells feels "...maintaining a pool of expert telegraphers is no longer a matter of national security." He mentioned that the military and maritime services are phasing out manual Morse code.

FCC denies and dismisses petition

On February 18, 1993, FCC Special Services Chief, Robert H. McNamara wrote Bill Wells advising him that his request for restructuring the Amateur Service was "...repetitive and previously considered" by the Commission. "These matters were the subject of numerous major rule making proceedings which generated many thousands of comments from the amateur community, including the recent proceeding that established the codeless Technician Class operator license," McNamara said.

"The current operator license classes, requirements and privileges were developed in accordance with the expressed desires of the amateur community to provide motivation for amateur operators to advance their communications and technical skills. We do not believe that you have presented sufficient evidence to justify revisiting this matter at this time."

"Further, Section 307(c) of the *Communications Act of 1934* ...prohibits an amateur station license from being longer than ten years. Because of this statutory requirement, legislation would have to be enacted by the Congress before the Commission could consider your suggestion to establish a lifetime amateur station license."

Wells told us that he is "...going to amend his petition to make the individual amateur license an operator license only to avoid the restriction of a station license having a term of no longer than 10 years." He believes that "...the amateur license issued to an individual is a defacto operator license only anyway since you do not have to notify the FCC of any portable or mobile operation and secondary station licenses have been abolished. Wells says he still feels that the ham community continues to want and need a more simplified and restructured Amateur Radio Service.

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(The following Press Release was issued by Bill Pasternak, WA6ITF, on March 3rd.)

NEW OFFICERS AT HAM RADIO BUSINESS COUNCIL

The Ham Radio Business Council has new leadership and several new member benefits. Elected as President is **Bill Pasternak, WA6ITF** of the Amateur Radio Newline ham bulletin service in Saugus, CA; Vice-President is **Evelyn Garrison, WS7A** of Evelyn Garrison and Associates, Issaquah, WA; Secretary/Treasurer is television sports statistician, **Nancy Boucher, N6XQR** from Garden Grove, CA, with **Louis Belsky, K2VMR** of Louis Belsky & Associates/Twozies Plus in New York City as Executive Director.

Pasternak and Garrison are well known in Amateur Radio business circles. Bill Pasternak is the co-founder of the Westlink Radio News Network now known as Newline; co-producer of most of the amateur radio related films and videos brought out since 1974, a broadcast facility design consultant and a full-time broadcast engineer with the Fox Television owned and operated station (KTTV) in Los Angeles.

Evelyn Garrison, WS7A is best known for her tenure with Icom America before leaving two years ago to form her own highly successful Amateur Radio related product representative firm known as Evelyn Garrison and Associates. Headquartered in Issaquah, WA, near Seattle, the firm represents the product image management and/or advertising for a number of highly successful product lines.

Boucher and Belsky are relatively new to the amateur radio business world, but not to the world of business. In addition to doing scoring for broadcast auto races, Nancy Boucher makes her living designing and programming custom database systems while at the same time serving as the newsletter editor for the famed WA6TWF "Super System" repeater group.

Louis "Lou" Belsky, K2VMR, a thirty-year veteran of Amateur Radio heads up two firms; Louis Belsky and Associates is a computer hardware, software and peripherals reseller and multi-location consulting firm while his unique Twozies Plus operation provides specialty items for families with multiple births (twins).

Rounding out the leadership team is **Lyndell C. "Chuck" Miller, WA0KUH** of Kansas City, MO who has taken over from **Walter Garrett, NOMAL** as Corporate Registered Agent to the State of Missouri.

According to Pasternak, the HRBC is in the process of signing an agreement with Accent-on-Travel Inc., of Temecula, CA to provide air-travel, auto rental, hotel accommodations and other business related needs to its members.

HRBC is also negotiating with the Forrest Com-

munications Company of Agoura Hills, CA to provide another unique service. Forrest Communications is a tele-production firm with the ability to provide HRBC, broadcast quality video production services for firms wanting to use video to help demonstrate and/or explain the operational characteristics of their products.

Other plans call for re-introduction of an expanded share-mail advertising program, higher visibility at major conventions and hamfests including the probable introduction of an HRBC sponsored "Take-A-Break" theatre at major shows with large flea-markets.

The Ham Radio Business Council was formed a year ago to provide businesses, clubs and individuals with services that no other unified source can provide.

In addition to those already mentioned, others serving with HRBC include **Bob Heil, K9EID** of Heil Sound Ltd., **Walter Garrett, NOMAL** of GAI Systems Inc., **Kevin Karamanos, WD6DIH** of Yaesu USA Corp., **Burt Hicks, WB6MQV** of the Westlink Report, Radio Amateur Information Network producer **Hap Holly KC9RP** and **Rev. David Novak, N0DN**.

For further information about the Ham Radio Business Council and the services it can provide please write to HRBC, 28197 Robin Avenue, Saugus, CA, 91350, or contact Mr. Louis Belsky, K2VMR at (718) 853-1542. (End of Press Release)

NEW ZEALAND GOVERNMENT TURNS DOWN... CODE FREE HAMMING BELOW 30 MHz.

We got a letter from **Gary E. J. Bold, ZL1AN** last week telling us about an effort made by New Zealand's national amateur organization to ease the regulatory structure prohibiting ham radio privileges below 30 MHz without telegraphy knowledge. Gary writes "The Morseman" column for the NZART Journal, "Break In." The New Zealand Association of Radio Transmitters, NZART, is the national Amateur Radio society of New Zealand.

It seems that the NZART Executive Council passed a resolution last fall calling for the Association to enter into negotiations with the New Zealand Ministry of Commerce which would culminate in the introduction of a code-less General License. We were supplied with a copy of the letter drafted by NZART's Administrative Liaison Officer, J.F.C. Johnson. Here is a quote from that letter:

"It is considered that in this day and age, there should be alternative ways to qualify for General Grade, and a choice should be offered from a selection of alternative skills or technical knowledge standards; in place of the present obligatory no-alternative morse code test. It is not suggested that the morse

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code requirement be eliminated, but rather that it remain as one of several alternatives from which a candidate for General Grade can make a selection."

An official from New Zealand's Ministry of Commerce - Communications, wrote NZART back stating that he is "...something of a loss to understand this apparent change in direction by the Council" and that he was unaware of any nation that allows code-free ham radio "...except under the waiver contained in regulation 2735 of the Radio Regulations, Geneva 1990. This waiver, on the morse code requirement, applies only to the operation of equipment above 30 MHz."

"It would seem that the Executive Council is seeking to explore a means of circumventing the provisions of regulation 2735. This proposed course of action would not only impact on the treaty implications surrounding the Radio Regulations, but also on reciprocal agreements. These agreements, negotiated by this administration, on behalf of amateur operators, are presumably of importance to the NZART and other operators who travel to other countries."

"The 'code-less General' qualification which the NZART suggests is a realistic proposal, [but] is outside the scope of current international, and national, regulatory regimes, through which suitably qualified amateur operators enjoy access to substantial amounts of a valuable resource."

"The matter of a 'non-morse General' amateur operator's certificate and license, is not one that the Communications Division would consider implementing, while the current regulatory and reciprocal regime remains in place. However, a coordinated regional approach, such as an initiative from the Region 3 International Amateur Radio Union executive, or better still, from the IARU membership as a whole, to amend the provisions of no. 2735 at an appropriate opportunity, may clear the way for such a goal to be achieved." The letter was signed by K.G. McGuire, Manager, International Radio Policy for the New Zealand Ministry of Commerce, Communications.

BASIC COMPUTER LANGUAGE INVENTOR DEAD AT 66

It is our sad duty to report the passing of Dr. John Kemeny, who with Thomas Kurtz developed the BASIC computer language. Every ham who has ever used a computer cut his or her teeth on computer programming by using the Beginner's All-Purpose Scholaristic Instruction Code. BASIC was created for just that: instruction.

Professors Kemeny and Kurtz developed the procedure-oriented language at Dartmouth College in the 1960's to assist them in teaching their introductory courses in computer science. BASIC was intended to

be very simple to understand and inexpensive to use so that large numbers of beginning students could take advantage of it for learning purposes. And BASIC computer programs could be executed immediately with the need for compiling into machine language.

The teaching language was never copyrighted and immediately became the grassroots language of the microcomputer revolution that began in the 1970's. BASIC allowed personal computer use to skyrocket because various dialects of it were included with every home computer: the Apple II, the TRS-80, the Commodore 64, the Atari 400 and 800 machines, and - of course - the IBM PC. To this day, every PC sold has some form of the BASIC programming language installed as part of its operating system.

Over the years, Kemeny and Kurtz periodically revised the original Dartmouth version of BASIC but they had no control over what happened to it beyond the Dartmouth campus since it was public property. The BASIC programming language should have made them millions but it was freely copied and legally passed on without charge.

To remedy this, Kemeny and Kurtz collaborated twenty years later (in 1984) on a microcomputer version of BASIC that was intended to comply with BASIC standards developed by the *American National Standards Institute (ANSI)*. *True BASIC* (as they called it) revealed errors immediately and was designed to make programs easily transportable between different makes and models of machines.

Most everyone agrees that BASIC is one of the easiest computer languages to learn and that it played a monumental role in the evolution of the personal computing industry. Kemeny passed away last December 26th, at the age of 66.

● As part of a plea bargain arrangement, *Jorge Mestre, NS3K, of Fairfax, VA, has surrendered his Amateur Extra Class license* and must dispose of his ham radio equipment within 60 days. Mestre pled guilty to willfully making fabricated 20-meter distress calls last summer on 14.313 MHz. The SOS supposedly involved a sinking ship located in the West Indies. Ham operators notified the Coast Guard and the FCC. The massive search and rescue effort cost the Coast Guard more than \$100,000. Mestre has agreed to make \$50,000 in restitution.

The prank distress calls were traced to Mestre through the efforts of the FCC's long range direction finding network, computer analysis of tape recordings and "signature print" comparison tests on Mestre's equipment which was later seized on a federal search warrant. He will be sentenced on May 7th and faces six years in prison and a \$250,000 fine.

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• **David (WA4NST) and Sharon (N4XLF) Brower** of Vero Beach, Florida, have lost a two year battle over their 68 foot radio tower and antennas. A County Judge has ruled for the plaintiffs (seven neighbors) and found the Brower's radio transmissions to be a noxious and offensive activity and the appearance of the tower and antenna is an annoyance and nuisance to the neighborhood.

The judge also broadly ruled that the tower is a building that exceeds the two story limitation in the deed restrictions which are silent about antenna support structures.

Pending appeal, the judge has stayed his order to remove the radio tower and antenna but has prohibited the Browsers from making any further radio transmissions from their home. Local amateurs are concerned that this case could set a dangerous precedent for any ham who has a neighbor who does not like the appearance of his exterior antenna and claims interference to home electronic appliances.

• **Radio Amateurs of Canada**, the new single national Canadian Amateur Radio organization will commence operation on May 2nd, 1993. The RAC Executive Planning Group met on Feb. 28th and cleared the last obstacles to the emergence of RAC.

The *Canadian Radio Relay League* (CRRL) and the *Canadian Amateur Radio Federation* (CARF) will hold their final Board meeting on May 1st, 1993 and will formally dissolve their organizations. The inaugural meeting of RAC will follow on May 2nd.

Their respective publications (CRRL's, *QST Canada*) and (CARF's, *The Canadian Amateur*) will continue separate publication for May and June. A new expanded "The Canadian Amateur" will be launched on July 1, 1993.

• **Where in the world is "VB" and "XJ"?** In honor of the 40th Anniversary of the National Library, the Canadian DOC (Department of Communications) has authorized all "VE" prefixed amateurs to use a special "VB" prefix between April 16 and June 16, 1993. Also Winnipeg, Manitoba, amateurs may use an "XJ4" prefix between March 26 and April 9 to commemorate the 100th Anniversary of the Winnipeg Parks Board.

• **GMØRSE** has been allocated to the *Morse Enthusiasts Group Scotland* (MEGS). This unusual call can often be found on 3530 kHz.

• **U.S. postage to Canada** is 40¢ per ounce plus 23¢ per additional ounce. Mail to Mexico costs 45¢ per ounce. QSL cards to both are 30¢. (Canadian mail to U.S. has just been increased to 49¢ ounce.)

DECEMBER VE PROGRAM STATISTICS

<u>December</u> <u>No. VEC's</u>	<u>1990</u> <u>*18</u>	<u>1991</u> <u>*18</u>	<u>1992</u> <u>*18</u>
<u>Testing Sessions</u>			
<u>VEC</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
ARRL	47.3%	45.5%	55.3%
W5YI	34.4	39.3	31.9
CAVEC	4.5	3.7	3.1
GtLakes*	3.1	3.5	1.2
Others (14)	10.7	8.0	8.5
Year-to-Date Sessions	6250	8118	10016
<u>Elements Administ.</u>			
<u>VEC</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
ARRL	52.3%	48.8%	57.3%
W5YI	28.7	32.9	27.8
CAVEC	4.8	5.1	3.6
GtLakes*	3.1	3.1	1.0
Others (14)	12.2	10.1	10.3
Year-to-Date Elements	105763	172061	193521
<u>Applicants Tested</u>			
<u>VEC</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
ARRL	50.9%	48.4%	56.8%
W5YI	29.6	34.0	28.1
CAVEC	4.4	4.4	3.6
GtLakes*	3.0	2.8	1.0
Others (14)	12.1	10.4	10.5
Year-to-Date Tested	64737	103251	193521

(* = Great Lakes is the former DeVry VEC)

<u>December</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Pass Rate - All	60.0%	66.3%	64.5%
Applicants/Session	9.0	12.0	10.9
Elements/Applicant	1.6	1.7	1.7
Sessions Per VEC	35.6	47.8	52.0

Administrative Errors by VE's/VEC's

<u>December</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Defect. Applications	1.0%	0.5%	0.2%
Late Filed Sessions	0.2%	1.0%	2.2%
Defective Reports	0.0%	0.0%	0.3%

VEC TESTING ACTIVITY BY FULL CALENDAR YEAR

<u>Year</u>	<u>Sessions</u>	<u>Persons</u>	<u>Pass Rate</u>	<u>Elements</u>	<u>Increase</u>
1985	3223	41439	58.2%	62589	--
1986	3784	42442	59.7%	61921	(-1.1%)
1987	4378	49728	60.6%	81042	+30.9%
1988	4903	53536	61.0%	89788	+10.8%
1989	5486	57417	61.5%	96092	+7.0%
1990	6250	64737	60.8%	105763	+10.1%
1991	8118	103251	66.2%	172061	+62.7%
1992	10016	115852	65.6%	193521	+12.5%

[Source: Personal Radio Branch, FCC, Washington, DC]

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EXAMINATIONS ADMINISTERED IN AMATEUR SERVICE

The following is the number of Amateur Radio Service examination elements administered by VECs over the last 2 years. Note that while there are 18 different VEC organizations, only seven VECs account for 95% of all ham testing. (The ARRL-VEC and W5YI-VEC together handle 83% of the testing "market.")

VEC:	1991	Percent	1992	Percent
ARRL	81901	47.6%	103727	53.8%
W5YI	54534	31.7%	56508	29.2%
CAVEC	9634	5.6%	6773	3.5%
WCAR	3613	2.1%	4645	2.4%
LARC	3441	2.0%	4357	2.2%
SunV	4474	2.6%	4064	2.1%
GtLks	5678	3.3%	3870	2.0%
Subtotal	163275	94.9%	183944	95.2%
Others	8786	5.1%	9577	4.8%
Total:	172061	100.0%	193521	100.0%

[Source: Personal Radio Branch, FCC, Washington, DC]

AMATEUR RADIO CALL SIGNS

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

Radio District	Gp."A" Extra	Gp."B" Advan.	Gp."C" Tech/Gen	Gp."D" Novice
0 (*)	AA0LX	KG0DS	N0VRS	KB0LAU
1 (*)	AA1FM	KD1NI	N1ONN	KB1ASR
2 (*)	AA2MV	KF2NG	N2TZR	KB2PZS
3 (*)	AA3DP	KE3HF	N3OJS	KB3APW
4 (*)	AD4AS	KQ4PC	(**)	KD4YME
5 (*)	AB5LE	KJ5IW	(**)	KB5YWC
6 (*)	AB6RE	KN6HQ	(**)	KD6SYN
7 (*)	AA7UK	KI7KY	(**)	KB7SXX
8 (*)	AA8KH	KF8ZG	N8XKP	KB8ORZ
9 (*)	AA9GA	KF9NP	N9SMB	KB9ILH
N.Mariana Is.	AH0Q	AH0AM	KH0BF	WH0AAU
Guam	NH2P	AH2CS	KH2GO	WH2ANF
Johnston Is.	AH3D	AH3AD	KH3AG	WH3AAG
Midway Is.		AH4AA	KH4AG	WH4AAH
Hawaii	(*)	AH6MI	WH6KV	WH6CQF
Kure Is.			KH7AA	
Amer. Samoa	AH8G	AH8AF	KH8AJ	WH8ABB
Wake W.Peale	AH9C	AH9AD	KH9AE	WH9AAI
Alaska	(*)	AL7OR	WL7IV	WL7CGQ
Virgin Is.	NP2W	KP2CA	NP2GI	WP2AHU
Puerto Rico	(*)	KP4UX	(**)	WP4LUV

CALL SIGN WATCH: * = All Group "A" 2-by-1 "W" prefixed call signs have been allocated in these radio districts and 2-by-2 format call signs are now being assigned to Extra Class amateurs.

** = Group "C" ("N"-by-3) call signs have now run out in the 4th, 5th, 6th, 7th and Puerto Rico call districts. The next lower Group "D" (2-by-3 format) call signs are now being assigned in these areas.

[Source: FCC Licensing Facility, Gettysburg, PA]

JANUARY 1993 AMATEUR LICENSING STATISTICS

January	1990	1991	1992	1993
New Amateurs:				
New Novices	2034	1713	655	1288
New Tech's	191	89	3318	3381
Total New:	2671	1816	4030	4728
Upgrading:				
Novices	1190	512	921	630
Technicians	477	243	**637	**763
Generals	338	147	417	389
Advanced	220	92	279	259
Total:	2225	994	2254	2041
Renewals:				
Total Renew:	*193	*63	*62	*82
Novices	*32	*6	*7	*11
Purged: (*=Due to change from 5 to 10 yr. lic. term.)				
Total Dropped:	978	2199	*8	*7
Novices	375	1010	*0	*2

Census:

Indiv. Oper.	466554	502133	547139	592378
Change/Year	+23387	+35579	+45006	+45239

Individual Operators by Class: (and % of total)

Extra	Advan.	General	Technic.	Novice	Total:
January 1990					
49950	101370	116329	114505	84400	466554
10.7%	21.7%	24.9%	24.6%	18.1%	100.0%

January 1991					
53941	105411	119905	127785	95091	502133
10.7%	21.0%	23.9%	25.5%	18.9%	100.0%

January 1992					
57809	107868	122786	161588	97088	547139
10.6%	19.7%	22.4%	29.5%	17.8%	100.0%

January 1993					
61615	110089	125568	195385	99721	592378
10.4%	18.6%	21.2%	33.0%	16.8%	100.0%

Club/ RACES & Military:	(1990)	(1991)	(1992)	(1993)
	2450	2434	2431	2431
Total Active:	469004	504567	564957	594809

% Increase +5.1% +6.6% +12.0% +5.3%
(** = Does not include Technicians upgrading to Tech Plus)

NUMBER OF AMATEURS BY CALL SIGN GROUP:

Group	Extra	Advan.	General	Technic.	Novice	Total
A	35083	683	249	7	0	36027
B	3846	28716	54	6	1	32623
C	14162	43897	67378	87356	48	212841
D	8278	36676	57781	107953	99670	310358
Other	246	117	106	63	2	534
Total	61615	110089	125568	195385	99721	592378

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

[Source: FCC Licensing Facility, Gettysburg, PA]

Where Things Stand!

FINDING SPECTRUM FOR PCS!

The House Energy and Commerce Committee has approved H.R.707 that would reassign 200 MHz of the airways currently set aside for government use to emerging technologies - including new personal communications services (PCS). A maximum of 20 MHz may be located in the 5 to 6 GHz range; the balance must come from spectrum below 5 GHz.

The *Emerging Telecommunications Technology Act of 1993* provides for the frequencies being distributed by the FCC but not through auctions; a process which the Clinton administration strongly supports. The spectrum will be doled out over a period of more than a decade.

During the mark-up, Congressman Mike Kreidler (R-Wash.) raised the concerns of amateur radio operators directly with Commerce Committee Chairman John Dingell (D-Mich.)

Kreidler pointed out that "...in my state of Washington alone, there are 19,416 amateur radio operators, and we rely heavily upon them in times of disaster. It is important that the vital volunteer activities undertaken by the Amateur Radio Service, particularly in times of emergency, are not curtailed as an unintentional consequence of this legislation."

Dingell indicated his support for amateur operators and his willingness to address the issue later in the legislative process.

The administration also favors spectrum "user fees" for FCC licensees. Clinton has close ties to the high-tech industry, underscored by the fact that Apple Computer chief John Scully, was seated with first lady Hillary Clinton during the president's recent speech to Congress.

Rather than modify H.R.707 to

include spectrum sale, Telecommunications Subcommittee Chairman Edward Markey (D-Mass.) said his group will work with other lawmakers and the administration on putting together a separate licensing reform bill that will include an "auction component" for new technology allocations.

House legislators said they were concerned about "conferring ownership" of the radio spectrum when it is an invisible, publicly owned resource. The Senate version (S.335) already provides for selling radio frequencies to the highest bidder.

The FCC wants wireless pocket telephones, computers, FAX machines, in-building networks and other new radio-based communications services to occupy the 1.8-2.2 GHz band; although some favor the 1.71-1.85 GHz government band.

Assigning PCS to previous government spectrum would speed up the allocation process since current users (primarily utility, oil, railroad and other industrial interests) would not have to be relocated.

MERGER DISCUSSIONS UNDERWAY ON NEW HDTV STANDARD

We were supposed to know by now which of the remaining high definition television (HDTV) systems would be selected as the industry standard - but we don't. One thing is certain, however. The NHK Narrow MUSE (Japan Broadcasting Co.) analog system has been formally eliminated. The HDTV selection process began back in 1987.

There are four digital systems still being considered and the FCC's "blue-ribbon" Advisory Committee on Advanced Television Service is now suggesting a "grand alliance" of the remaining systems into a single composite system. All

of the four systems have shortcomings and a merged system would combine the best elements of each system. For example, some have a better picture, some are more cost effective ...others are more interference free.

There is some doubt, however, whether the remaining companies involved (General Instrument, Zenith Electronics, AT&T, Massachusetts Institute of Technology, David Sarnoff Research Center, North American Philips and Thomson Consumer Electronics) will be able to agree to consolidation by April 1st.

If they can't cut a deal, then each system will be tested separately and a single system selected by the Advisory Committee - probably in the fall. That means the FCC Commissioners won't adopt an HDTV standard until "early 1994" - a year after the scheduled date.

The HDTV system chosen will likely become the global standard. The present FCC schedule calls for all television to be transformed to HDTV by the year 2008 - a date that the National Association of Broadcasters calls "unrealistic."

INTERIM FCC CHAIRMAN NAMED

Bill Clinton still has not selected a permanent replacement for FCC Chairman Alfred Sikes who resigned on Jan. 19th. As expected, Commissioner James Quello (a Democrat) was named interim Chairman. He will serve until Clinton names a permanent replacement and the nominee goes through the Senate confirmation process. Quello has served at the FCC for nearly twenty years.

Commissioner (Republican) Sherrie Marshall, whose term expired last June, will not be reappointed. There are all sorts of candidates mentioned for the two vacant FCC Commissioner slots.

W5YI REPORT

Nation's Oldest Ham Radio Newsletter

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March 15, 1993

• While President Clinton hasn't selected his FCC Chairman, he did pick **Larry Irving to head the NTIA**. The *National Telecommunication and Information Administration* is the White House top telecommunication's advisor. Irving has been a counsel to the House telecommunication's subcommittee since 1987 and played a key role in crafting the new cable TV law. It is expected that the NTIA will assume a heightened role in the Clinton administration.

• **May 1st is the day that "800-number portability" goes into effect.**

This allows businesses to change carriers without changing their toll numbers and risking loss of customers and relationships.

MCI, Sprint and AT&T are already gearing up for the battle. Incoming toll-free "800" calling is a \$7 billion market and growing at 10% a year. Since they had a 20 year head start, AT&T currently has 75% of the business. MCI follows with about 16% and Sprint claims 8%.

You can expect to see all sorts of broadcast and print advertising in an attempt to get businesses to change from one "800" service carrier to another.

• It appears that it won't be long before **telephone companies will be allowed to own and offer video programming** inside their service area. The Clinton administration is already considering methods that would provide competition for cable TV. You can also expect cable companies to offer telephone service as common carriers.

At least one local Bell telco (Ameritech) said they would be willing to open up local telephone service to competition in exchange for entry into the long distance and cable TV marketplace. The big winner, of course, will be consumers who will pay lower rates. The 1984 Bell System divestiture cur-

rently prevents the seven regional Bell operating companies (RBOC) from being in the long distance business. (AT&T has a 68% share in the fast growing \$65 billion long distance industry, to MCI's 16% and Sprint's 10%.)

• Tele-Communications, Inc., the nation's largest operator of cable systems will shortly **begin installing digital compression equipment that will allow it to offer up to 500 channels**. The big question is what programming could possibly be offered on 500 different channels?

In some cases they will be "repeats" of previous shows you may have missed. "Personal TV" will allow viewers to tailor their viewing to their own schedule without going to the trouble of programming the VCR.

"Video-on-demand" will be big business! Be on the lookout for a big expansion in interactive TV. You will be able to scroll through a menu to determine which movie you want to watch, which product to order or which news story you want expanded upon ...and more!

Cable TV is now in 66% of all U.S. homes - and in 81% of all upscale homes. Compressed video should be available to half the nation's homes within five years.

• **Do cellular phones cause brain cancer?** A March 8th article in *Fortune* magazine states the "wireless revolution" is bathing us in electromagnetic radiation. It also reports that a researcher for Motorola, the nation's No. 1 cellular telephone manufacturer, says he "...would not use a cellular phone more than 30 minutes a day."

FCC Chief Engineer Tom Stanley says he intends to recommend that the Commission initiate a rulemaking to update its guidelines for evaluating environmental RF (radio frequency) fields.

• Effective April 26th, the **FCC will no longer certify scanners which cover - or can be "readily alterable" to cover - the cellular telephone frequencies at 824-849 and 869-894 MHz**. Six months later, no such scanner may be manufactured in or imported into the United States. The FCC will require scanner marketers to certify that their equipment meets the requirements.

• **AT&T has a new Cellular Privacy System** that scrambles the signal as it travels through the air. It is descrambled at the location where it is handed off to the wired telephone network. Eavesdroppers intercepting the AT&T system will hear only "chirping bird" sounds. The *Electronic Communication Privacy Act of 1986* makes it a crime to monitor cellular phone calls.

Canada's Dept. of Communications has also proposed an amendment to the country's *Radio-communication Act* that would **prohibit the unauthorized interception of cellular phone calls**. Cellular service providers will be "strongly encouraged" to offer customers optional encryption services and telephone companies will be ordered to study ways to implement an audible signal that would allow users to identify any call made through a cellular service.

• Do you remember how **United Parcel Service back in early 1988 filed very impressive comments** stating they intended to use ACSB (amplitude campandored side-band) equipment operating at 220-222 MHz to implement a nationwide network to improve the efficiency of their package delivery service. They even created a subsidiary to produce the needed VHF transceivers.

Here is a quote from their 1988 filing: "The amateur radio

community already has a generous allotment of spectrum that more than adequately permits it to carry out its operation. Moreover, the few amateur stations currently operating in the 220-222 MHz band can be located elsewhere with minimum disruption."

A few months later (August 1988) the FCC reallocated 220 to 222 MHz to the Private Land Mobile Service. The item was presented to the FCC Commissioners at an open meeting by Julius Knapp, Chief of the *Frequency Allocations Branch* of the FCC's *Office of Engineering and Technology*.

There can be no doubt that the UPS filing played a very important role in the Commission's decision to reallocate 220 to 222 MHz to narrow band business radio. Remember UPS is a very big company which translates to "clout." Their annual revenue exceeds \$16 billion and UPS delivers nearly three billion packages and documents every year!

Knapp clearly mentioned in his presentation the UPS intention "...to develop a state of the art delivery system using narrowband equipment in the 220 MHz band." (A word-for-word quote by Knapp to the Commissioners.)

We mention all of this because UPS has now totally abandoned their plan to use 220 to 222 MHz for their package tracking system. The March 1st issue of *Radio Communications Report*, a weekly business radio trade publication, tells how UPS "...has invested about \$150 million in a nationwide cellular mobile data network that gives its customers immediate access to delivery information."

"UPS activated the system last month for its fleet of 50,000 vehicles that reportedly pick up more than one million packages a day. UPS noted it selected cellular over other communications technologies because of its highly reli-

able, fail-safe redundancies, extensive geographic coverage and potential for future upgrades."

"The network operates with custom built electronic clipboards, called DIADs, which enable UPS drivers to enter information such as pickup time and date, delivery time and date and customer signatures each time they make a delivery or pickup," the RCR article reported.

Fifty-five cellular carriers formed an alliance to serve UPS nationally. We wonder whatever happened to UPS and 220 MHz?

In any event, the FCC will hold a lottery to select commercial nationwide 220 to 222 MHz licenses on March 31, 1993. Could it be that UPS did not want to take their chances with a lottery method to determine who the licensees would be?

- **The STS-55 shuttle flight with five ham astronauts aboard** will no doubt have taken place before our next issue. Remember you can follow the space flight on 28.658 MHz, 21.395 MHz, 14.295 MHz, 7.185 MHz and 3.860 MHz. Shuttle communications will be rebroadcast by WA3NAN, the Goddard Space Flight Center amateur radio club. (A special QSL is available from WA3NAN, Box 86, Greenbelt, MD 28778 to those who confirm hearing their transmissions.)

- **The Circle Ten Council of the Boy Scouts of America** has agreed to permit MetroCel (a division of McCaw Cellular) to construct a building and antenna tower at Camp Wisdom, Dallas, Texas. The Building and tower will be shared with K2BSA, the amateur radio station of the Boy Scouts of America. This facility will more than double the building space and provide a taller tower structure than is presently used. Construction has already begun and should be complete by May.

- After 15 years of operation, editor/publisher Art Reiss, K9XI advises **220 Notes** Newsletter is looking for a new production home! (Contact **Walter Altus, AA9AW**, in writing at: W6539 Birch Street, Onalaska, WI 54650.)

- **Want to go on a DX-pedition to the Maldives/8Q7 or Sri Lanka/4S7?** Contact: Vincent Paul at Post-A-Holiday Travel, 13 Dalcross Road, Hounslow, Middlesex, England TW4 7RA. (Phone or FAX: 0044-081-570-9322 Daily: 0700 to 2100 hrs GMT) He will arrange for you to get a ham license.

- **Carole Perry, WB2MGP** wants to contact any youngsters interested in making a presentation at the upcoming Dallas HAMCOM convention. Carole will be hosting a teacher's workshop on Friday, June 4th, and the Youth Forum on Saturday or Sunday, June 5th or 6th. You can reach Carole at: P.O. Box 131646, Staten Island, NY 10313-0006 or Tel. (718) 761-5733.

- **Kenwood has unveiled the World's Smallest Transceiver.** The TS-50S is only 7.2" wide by 2.4" high and 9.3" deep and weighs 6.4 lbs. The all mode (SSB/CW/AM/FM) 100-watt HF transceiver also has a general coverage (500 kHz to 30 MHz) receiver and all the "bells and whistles" ...including 100 memory channels, dual VFOs and computer controllable. (\$1,199.95)

- **Amateur Radio Engineering, Inc., has just introduced "CW Link"** that works with "HamLink" to allow high-speed CW, the use of headsets, and a microphone. *HamLink* is an interface that goes between the telephone line and the computer port of your transceiver and allows you to control them with a touch-tone telephone. (\$129.95) (ARE, P.O. Box 169 Redmond, WA. 98073, Tel. 206/882-2837.)

TV SERIES COORDINATED ON THE HAM BANDS Producers leased radios from commercial firm.

During mid-February, a Fort Worth, Texas, amateur scanning across the amateur 420 MHz ham band came across transmissions that didn't sound like ham radio. They sounded like unidentified business communications. He called the FCC and retransmitted the signals over a local repeater so the FCC in Dallas could hear them! An engineer was later dispatched to Fort Worth to investigate. The operation was located through close-in direction finding techniques.

It turned out that Cannon Television, Inc., of Irving, Texas, and a west coast based television crew had rented thirty-six Motorola P-200 handheld radios to direct operations for "Walker, Texas Ranger" - a television series being produced in downtown Fort Worth starring actor Chuck Norris. The problem was that the radios were apparently unlicensed and were programmed to operate on 443.0125 MHz and five other nearby frequencies in the 70-cm ham band.

The Dallas FCC Field Office issued a *Notice of Apparent Liability for Forfeiture* (an FCC administrative fine) in the amount of \$8,000 against Cannon Television, Inc., for operating unlicensed radio stations.

We spoke last week to the producer of the television series, Bob Hargrove. He told us that they merely rented the radios from Delt Communications, a commercial radio rental company in Houston, Texas. He said that he had rented handheld radios dozens of times before from this and other communications firms and has never had a problem. Hargrove said his film crew simply used the radios once they were received.

He believes it is the responsibility of the communications company leasing the 2-way radios to insure that the equipment is operating properly, on the correct frequency and licensed. Hargrove said he had no idea why he got the fine when he rented the radios from a reputable firm that commercially specialized in this sort of thing. He added that Delt Communications was well aware his crew would be using the radios to coordinate the filming of a television series.

"We are trying to figure out what is going on. We simply do not understand it," he said. "I have been involved in television and film production and renting radios on location for twenty years. This has never happened before - nor has anyone ever approached us to tell us we individually had to have licenses to operate them. We rented the same radios from the same firm that are being used on three other shows here. And we had been using those radios for two-and-a-half weeks prior to when we were shut down."

The radios were apparently labelled with the proper business band channels but were programmed to operate on the ham bands in between simplex 70-cm frequencies. Hargrove told us he knew nothing about the legalities of "radio" - only that he routinely rents them all over the United States for shooting on location. "We had someone fly in from Houston that night to reprogram the radios," he said. "Delt Com-

munications is also confused as to what went wrong. These same radios were used on two Oliver Stone movies here - and numerous other pictures. No one has had a problem."

After three different phone calls we were finally able to contact Delt Communications in Houston but the person - who said he was a manager - was very evasive and seemed annoyed at us. We wanted to know how all thirty-six radios could be programmed to the same six "in-between" simplex 70-cm ham band channels but the "manager" was not willing to answer. We also wanted to know if Delt Communications was licensed and coordinated to operate 2-way business band radios in Fort Worth nearly three hundred miles away from Houston.

The "manager" (who would not give his name) said "There is a big mess in frequency coordination here and the FCC does not tell you things. All I can tell you is this. Yes, there was a problem and it has been taken care of. That is all I can tell you. I do not know who you are, what your angle is or where you are coming from. Why don't you say that whenever people turn around in Dallas, someone is trying to hit them up for money. Why don't you say that if you want to be honest? That is all you are going to get from me. If there is anything else that anyone needs to ask, tell them to talk to me, O.K.? You have a good day." ...And he angrily hung up.

One theory is that Delt Communications was not licensed to operate the radios in Fort Worth - some three hundred miles from Houston - and chose to improperly program the low power radios to what they thought would be hidden spectrum where they would not be detected.

I also spoke to the Dallas FCC engineer who went out to Fort Worth to investigate the complaint. He confirmed that they were still looking into the situation and was limited in what he could say at this time. It appears, however, that there is a question as to whether the "supplier" - who he would not identify - is coordinated to operate in the Dallas/Fort Worth metroplex - that is, if the handhelds were programmed to the correct business band frequencies that were labeled on the radios - which they were not.

"It depends on how the radios are licensed. Frequency coordination is handled by the private sector and sometimes the paperwork takes a while to catch up to the FCC. They certainly are not authorized to program business radios to frequencies in the ham bands. The radios should have been leased with a copy of the private carrier license under which the radios would be operated. The license would indicate the geographical area and authorized frequencies. The units could be operated in the whole state of Texas if they were coordinated that way. There are different coordinators depending on the radio service."

"The user of the radio equipment is the one we hold accountable if the equipment is not licensed. We are also looking into holding the people that supply unlicensed equipment responsible."