

W5YI

National Volunteer Examiner Coordinator

REPORT

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

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...and much much more!*

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VHF No-Code Ham Entry Discussed...

The 29th annual *Tropical Hamboree* held in Miami on February 4 and 5 was not only the ARRL Florida State Convention, but also the site of the first meeting of the year of the *Amateur Radio Industry Group*. The general industry meeting was held at 8:00 p.m. the evening before the hamfest at the Miami Airport Hilton's *Continental Room*. The loosely knit group is made up of most major ham radio publishers ...and dealers, importers and manufacturers of amateur radio gear.

As one might guess, the primary subject on the agenda was the recent publicity concerning the possibility of a no-code entry level license similar to that recently suggested for Canada. The ARRL had also published an editorial (authored by Exec. VP **Dave Sumner/K1ZZ** and Pres. **Larry Price/W4RA**) in the January QST questioning "Should basic Morse code ability be a requisite for each and every radio amateur, irrespective of their interests? Do the present Morse requirements separate the sheep from the goats, or do they simply let in fewer of each?"

Two smaller industry meetings were held prior to the 8:00 p.m. general meeting. One included League officials and several members of the *ARRL No-Code Study Committee* ...the other was attended by certain participants of the No-Code Coalition who met with attorney Ray Kowalski. Kowalski, an ex-FCC official, represents an alliance of amateurs seeking to implement a VHF and higher frequency code-free ham entry level similar to that suggested for Canada. All meetings were chaired by **C. H. "Chip" Margelli/K7JA** of Yaesu U.S.A. It was

agreed that amateur radio growth was the number one priority for the next decade. The number of ham operators has not grown significantly despite widespread availability of ham testing and voice privileges for Novice operators.

While not an official meeting of the Ad Hoc **ARRL No Code Committee**, most of its members were at the Miami Hamboree industry meeting. (Actually the first formal meeting takes place outside of Evansville, Indiana, on March 10th.)

The main Miami industry meeting contained presentations supporting a code-free VHF entry-level class by **Fred Maia/W5YI**, attorney **Ray Kowalski** and **Wayne Green/W2NSD** of *73 Magazine*. (A copy of my remarks are contained elsewhere in this newsletter.) Kowalski told about his December 2nd meeting with **Ralph Haller/N4RH**, Chief of the FCC's Private Radio Bureau. Green's comments centered on the importance of amateur radio as a means of introducing our youngsters to high technology. (He didn't consider the code to be very "high tech.")

By the way, the **ARRL No-Code Study Committee** is made up of the following members. They would be interested in hearing your views!

Representing the ARRL:

George S. Wilson III, W4OYI
(Chairman, ARRL Vice President)
1649 Griffith Avenue
Owensboro, KY 42301

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an impediment to individuals... especially young people - obtaining amateur licenses. He felt that we would not be able to keep our amateur bands unless we increased our numbers. Amateur radio will just "go away" if we don't grow. Barry said more emphasis should be placed on the written examination.

"I know a lot of people will be shocked to hear an old timer like me say that ...I like to sit down and wobble the key. I will do that forever. I would rather use the code than a computer. But I don't want to see amateur radio die out. Most of the improvements made in radio came out of an amateur's shack. We need to swell our ranks by at least 200,000. I lecture three days a week at Arizona State. The youngsters tell me they would like to become radio amateurs but they don't want to spend the time learning the code. What these young people are interested in is gaining a better knowledge of communications ...which more and more is going to rule our lives. I think young people in this country are just as interested in making it work as we were. The young ones have the desire to learn. Very few will use the code. Why mess around with it."

Three separate videos were produced and are now in the process of being edited in Los Angeles. One was a message to the FCC, another for the amateur community, a third (with Kelly Howard) is aimed at youngsters for in-classroom use.

The Goldwater videos should be ready for distribution by March 15th. We will tell you how you can get one to show at your club meeting in our next Report. In addition, **Larry D'Anna/WA3KOK** has arranged for "**A Message from Barry Goldwater/K7UGA**" to be uplinked to the Westar 5 satellite/Transponder 1D (1 direct) at 3:00 p.m. on Sunday, March 12, from the P.V.S. Uplink Facility in Washington, D.C.

• Major General **Earle F. Cook, W4FZ**, who retired in 1963 as the Army's chief signal officer, died February 19th of a heart attack at his home in Arlington, Virginia, at the age of 81. A 1931 West Point graduate, Cook was originally licensed as a teenager in 1926.

• An agreement of understanding between the International Amateur Radio Network and the Young Communist League was signed in Moscow on January 28th. The "Protocol of Objectives" sets

out the parameters by which the two groups will operate in the event of emergencies. S. Yefifantsey, secretary of the *Central Committee of the Y.C.L.* is also considering sending a Soviet ham delegation to the 1989 Dayton HamVention ...and the IARN annual convention in Maine.

• We got a pleasant note from YASME's **Lloyd/W6KG** and **Iris/W6QL Colvin** postmarked from Malta. Iris said they made a total of 3000 QSO's from Lagos, Nigeria. They were not able to get a license to operate from Niger, however. "During the last 4 months, we had successful operations as 5B4KG (Asia), ZC4ZR (Asia), 9H1JN (Europe) and W6QL/5NO (Africa.)" They are now headed state-side for the hamfests at Visalia, California, and Dayton. Iris also noted that they plan to soon visit all fifteen republics in the U.S.S.R.! (Whether they will get operating authority is another story!)

CANADA TO ABOLISH CW SUBBANDS?

The Canadian Department of Communications (now called *Communication Canada*) has been taking a hard look at the radio spectrum in light of present day technology.

A notice in the February 18th *Canada Gazette* (their version of our Federal Register) proposes to completely **do away with all subband allocations** in their amateur service. What will determine the emissions authorized in the various ham bands will be solely a maximum bandwidth. So-called digital/telegraphy subbands will no longer exist in Canada at all.

On 160 through 10 meters, the maximum bandwidth allowed would be 6 KHz. On 6 and 2 meters a 30 KHz bandwidth would be authorized - at 220 MHz: 100 KHz. A 6 MHz bandwidth is proposed for the 430/902/1240 MHz ham bands. Comments close in mid-April on the proposal

This new Canadian proposal has no bearing whatsoever on the proposed four class restructuring of their amateur service (see Nov. 1, W5YI Report). That restructuring, as you know, includes code-free entry level operation at the VHF (30 MHz and higher frequency) level. It is anticipated that the government of Canada will finalize that matter in time for fall ham classes. Actually the curriculum and parameters are pretty much 'cast in concrete' now. The initial no-code Canadian license will require about 30 hours of self or classroom study. More later.

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GROWTH IN THE PERSONAL RADIO SERVICES GENERAL MOBILE & AMATEUR RADIO SERVICE - 1978 to 1988

10 Yrs.	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978
GMRS	35743	37669	35819	33860	33675	27141	25063	22818	20788	16609	10609
+236.91%	-5.11%	5.16%	5.79%	0.55%	24.07%	8.29%	9.84%	9.77%	25.16%	56.56%	
Extra Cl.	46885	43902	41082	38495	36149	34511	31530	29768	26613	24232	22498
+108.4%	6.80%	6.86%	6.72%	6.49%	4.75%	9.45%	5.92%	11.86%	9.83%	7.71%	
Advanced	98681	98610	97771	97959	97765	95771	94588	94428	88715	84981	83436
+18.27%	.07%	.86%	-.19%	.20%	2.08%	1.25%	.17%	6.44%	4.39%	1.85%	
General	113082	114398	115715	117107	116963	118223	119684	125747	123904	122783	118808
-4.82%	-1.15%	-1.14%	-1.19%	0.12%	-1.07%	-1.22%	-4.82%	1.49%	0.91%	3.35%	
Technic.	101495	93466	85312	83679	80680	77298	75703	76976	70061	69022	68738
+47.65%	8.59%	9.56%	1.95%	3.72%	4.38%	2.11%	-1.65%	9.87%	1.51%	0.41%	
Novice	80168	83013	79882	78616	80599	85823	88799	80162	72588	61436	62856
+27.54%	-2.25%	-3.92%	1.61%	-2.46%	-6.09%	-3.35%	10.77%	10.43%	18.15%	-2.26%	
TOTAL:	440311	433389	419762	415856	412156	411626	410304	407081	381881	362454	356336
+23.46%	1.60%	3.25%	0.94%	0.90%	0.13%	0.32%	0.79%	6.60%	5.36%	1.72%	
RACES:	315	343	346	351	440	490	549	563	577	591	605
Club:	1835	1940	2119	2235	2343	2420	2742	2992	3565	4028	4585
Military Rec.:	113	125	140	163	175	193	217	241	295	340	367
TOTAL:	442574	435797	422367	418605	415114	414729	413812	410877	386311	367413	361893

+ 2.03% Annual growth rate over the last ten years. (1978-1988)

+ 0.65% Annual growth rate over the last five years. (1983-1988)

It is interesting to note that the Amateur Radio Service annual growth rate for the seven year period between December 1974 (254683) and December 1981 (410877) was 7.1% per year. This was during the period of phenomenal growth in the Citizen's Radio Service.

The above statistics were sent to us by the FCC's Personal Radio Branch. It basically shows that Amateur Radio growth is *slowing down considerably*.

Note that the *General Mobile Radio Service*, the 460 MHz Personal Radio Service, has more than tripled in the number of participants over the last ten years.

The number of Amateur Extra Class hams has more than doubled over this same period. Technician Class amateurs have increased by nearly 10% per year since "Novice Enhancement." The number of Novices, however, has remained

fairly constant since 1981. It appears that most newcomers to Amateur Radio are more interested in VHF repeater and packet than in HF operation.

The presentation that we gave before some members of the ARRL No-Code Study Committee at the Miami Hamboree emphasized some of these statistics. We also ran a computer analysis of the FCC's *Amateur Radio Master File* sorted by year-of-birth. The average U. S. licensed amateur is now nearly 50 years old. The Master File not only contains current licensees, but also those amateurs who are still within the "grace period" for renewing their expired amateur radio operator license without retesting. These statistics appear on the next page.

NOVICE AMATEUR RADIO COURSE - Complete with 2 cassette Morse
code and practical workbook in a binder. Everything you need
to know to become a Novice amateur radio operator - or to teach an

AMECO LICENSE PREPARATION MANUALS - Contain all Amateur
Radio Exam questions, answers and explanations why
the answer is correct. Technician/General
Class, Extra Class, Military, and Morse Code.

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AMATEUR RADIO OPERATOR CENSUS

(Sorted by YOB, Year of Birth)

YOB	EXTRA	ADV.	GEN.	TECH.	NOV.	TOTAL
-1900	199	268	314	60	55	896
1900	50	125	140	26	24	365
1901	53	182	176	39	24	474
1902	71	254	217	49	35	626
1903	372	380	286	83	41	862
1904	103	460	431	99	66	1159
1905	132	644	577	156	90	1599
1906	197	866	693	202	132	2090
1907	211	1008	863	278	139	2499
1908	258	1059	939	346	201	2803
1909	268	968	963	347	199	2745
1910	276	1073	1053	422	216	3040
1911	286	1151	1086	441	256	3220
1912	345	1219	1274	569	297	3704
1913	412	1398	1424	661	346	4241
1914	527	1675	1638	691	441	4972
1915	618	1814	1778	854	523	5587
1916	627	1864	1900	904	545	5840
1917	823	1994	2196	1017	596	6626
1918	864	2217	2438	1197	752	7468
1919	796	2203	2259	1207	753	7218
1920	888	2404	2782	1429	894	8397
1921	994	2428	2968	1513	1032	8935
1922	839	2256	2882	1521	1057	8555
1923	813	2228	2896	1488	1042	8467
1924	782	2154	3091	1688	1141	8856
1925	777	2051	2997	1705	1145	8675
1926	708	1934	2900	1722	1092	8356
1927	709	1856	2688	1823	1137	8213
1928	681	1796	2602	1787	1114	7980
1929	673	1762	2355	1722	1126	7638
1930	718	1788	2525	1829	1092	7952
1931	707	1783	2466	1763	1111	7830
1932	727	1672	2286	1789	1180	7654
1933	675	1532	2086	1689	1112	7094
1934	732	1558	2094	1749	1225	7358
1935	708	1606	2198	1786	1182	7480
1936	795	1575	2160	1849	1339	7718
1937	947	1786	2285	1985	1287	8290
1938	1102	2003	2553	2146	1471	9275
1939	1166	2016	2509	2148	1501	9340
1940	1382	2186	2713	2265	1625	10171
1941	1384	2328	2898	2549	1779	10938
1942	1713	2868	3285	3006	2068	12940
1943	1697	2685	3180	2956	2013	12531
1944	1382	2351	2739	2733	1902	11107
1945	1325	2320	2593	2593	1782	10613
1946	1567	2716	2707	3252	2111	12353
1947	1628	2985	3105	3515	2291	13524
1948	1380	2428	2509	2950	2097	11364
1949	1234	2291	2307	2892	2074	10798
1950	1088	2044	2035	2708	2000	9875
1951	1049	2029	1883	2716	2087	9764
1952	1038	1916	1883	2674	2050	9561
1953	909	1899	1643	2686	2115	9252
1954	822	1554	1500	2545	2050	8471
1955	705	1397	1351	2339	1901	7693
1956	644	1197	1157	2230	1826	7054
1957	574	1057	1069	2062	1806	6568
1958	487	794	967	1784	1689	5721
1959	388	758	891	1672	1725	5434

YOB	EXTRA	ADV.	GEN.	TECH.	NOV.	TOTAL
1960	403	699	929	1656	1723	5410
1961	386	656	992	1553	1813	5400
1962	335	494	947	1341	1784	4901
1963	274	459	837	1140	1764	4474
1964	188	288	666	988	1781	3911
1965	134	177	456	782	1747	3296
1966	115	156	387	680	1786	3124
1967	96	130	267	584	1836	2913
1968	70	96	237	597	1781	2781
1969	53	88	203	546	2088	2978
1970	43	59	174	486	1981	2743
1971	46	63	144	472	1883	2608
1972	30	29	130	400	1606	2195
1973	21	22	89	374	1342	1848
1974	11	17	65	278	1072	1443
1975	5	7	27	194	749	982
1976	1	3	22	115	457	598
1977	0	0	5	63	343	411
1978	1	0	4	28	152	185
1979	0	0	0	7	51	58
1980	0	0	0	2	12	14
1981	0	0	0	0	3	3

TOTALS: 47937 122964 95756 104256 109192 480105

% TOT: 9.98% 25.61% 19.94% 21.72% 22.74%

[As of end of 1988 Fiscal Year, Sept. 30, 1988]

WHO ADMINISTERS THE HAM TESTS?

The FCC recently released the 1988 VEC testing statistics for 1988. There were **89788** test elements administered at VEC sessions last year vs. 81042 in 1987; 61921 in 1986; and 62589 in 1985.

VEC	Jan-Jun	Jul-Dec	Rank	%	Cumul.
ARRL	25085	19313	1	49.4%	49.4%
W5YI	12698	10585	2	25.9%	75.3%
CVEC	2780	2824	3	6.2%	81.5%
DeVry	2101	1663	4	4.2%	85.7%
Sunnyvale	1378	1290	5	3.0%	88.7%
WCAR	1035	830	6	2.1%	90.8%
GLAARG	1008	731	7	1.9%	92.7%
Laurel	738	747	8	1.7%	94.4%
SAND	440	502	9	1.1%	95.5%
PHD	500	282	10	.9%	96.4%
Anchorage	339	373	11	.8%	97.2%
TEARC	403	204	12	.7%	97.9%
Charlotte	179	273	13	.5%	98.4%
Others: (7*)	943	484	-	1.6%	100%
Totals:	49627	40101	20	100%	100%

(* The BEARS, Boeing Employees Amateur Radio Society, and Honolulu ARC are no longer VEC's. At year end there were 18 active VEC organizations. It is interesting to note that only six of these groups account for over 90% of the amateur radio operator license examinations administered.)

(Source: FCC Personal Radio Br./Washington DC)

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JANUARY VE PROGRAM STATISTICS

<u>January</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>No. VEC's</u>	*76	*60	*62
Testing Sessions	288	253	354
<u>VEC</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
ARRL	48.3%	32.4%	37.9%
W5YI	24.0	44.7	36.7
CAVEC	8.0	1.6	5.7
DeVry	5.9	6.3	5.1
Others	13.8	15.0	14.6
Year-to-Date Sess:	288	253	354
Elements Administ.	4211	4409	5652
<u>VEC</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
ARRL	55.8%	49.7%	44.3%
W5YI	22.2	31.7	34.0
CAVEC	6.0	.5	6.3
DeVry	4.4	3.9	2.2
Others	11.6	14.2	13.2
Year-to-Date Elem.	4211	4409	5652
Applicants Tested	2939	2599	3313
<u>VEC</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
ARRL	58.6%	42.3%	42.9%
W5YI	20.2	32.8	35.1
CAVEC	5.3	.7	5.3
DeVry	4.6	4.5	2.6
Others	11.3	19.7	14.1
Year-to-Date Tested	2939	2599	3313
<u>January</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Pass Rate - All	61.3%	63.3%	60.1%
Pass Rate - W5YI	56.3%	56.9%	55.5%
Applicants/Session	10.2	10.3	9.4
Appl./Session W5YI	6.7	9.2	8.9
Elements/Applicant	1.5	1.7	1.7
Sessions Per VEC	3.8	4.2	5.7

Administrative Errors by VE's/VEC's

<u>January</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Defect. Applications	0.82%	0.73%	0.54%
Late Filed Sessions	4.17%	13.44%	1.41%
Defective Reports	0.69%	1.58%	1.41%

*Note:

The FCC Considers ARRL, W5YI and DeVry to be 13 VEC's each since VEC's are appointed on a regional basis. The 13 regions are: Call Sign districts 1 through 0 plus Alaska (11), Caribbean (12) and Pacific Insular areas (13).

Source: Pers.Rad.Branch/FCC; Washington, D.C.

JANUARY AMATEUR LICENSING STATS

<u>January</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	
First Time					
Amateurs	1500	2299	1189	2234	
Upgrading:					
Novices	647	668	884	1373	
Technicians	257	241	276	428	
Generals	116	309	255	320	
Advanced	77	170	175	209	
Total:	1097	1388	1590	2330	
Renewals:					
Total Renew:	1759	2378	1972	868(*)	
Novices	207	143	173	143(*)	
Purged:(*)					
Total Drop:	873	510	759	1473(*)	
Novices	535	326	355	550(*)	
Census:					
Indiv. Oper.	416615	421271	432411	444167	
Change/Year		+4656	+15796	+11756	
Indiv. Operators by Class:					
<u>Extra</u>	<u>Advan.</u>	<u>General</u>	<u>Tech.</u>	<u>Novice</u>	<u>Total:</u>
January 1986:					
38624	98003	117110	83879	78999	416615
9.3%	23.5%	28.1%	20.1%	19.0%	100%
January 1987:					
41255	97786	115616	85536	81078	421271
9.8%	23.2%	27.4%	20.4%	19.2%	100%
January 1988:					
43970	98408	113958	93675	82400	432411
10.2%	22.7%	26.3%	21.7%	19.1%	100.0%
January 1989:					
47221	99164	113823	102931	81028	444167
10.6%	22.3%	25.6%	23.2%	18.3%	100.0%
Club/					
RACES &	(1986)	(1987)	(1988)	(1989)	
Military	2737	2568	2395	2263	
Total Active	419352	423839	434806	446430	
% Increase		+1.1%	+2.6%	+2.7%	

(* Note: Be aware that due to the inauguration of the ten year term amateur radio operator license in January 1984, 1988 was the last year that there will be any renewals or "drop outs" for a five year period. Renewals and purged licenses ("drop outs") will not resume until January 1994. The (*) figures indicated above are actually late reported 1987 figures. These figures will shortly drop to zero. Amateurs still will be dropping out of ham radio, of course - but they will not show up in the FCC's licensing statistics until the end of the ten year term when they do not renew. The FCC data base will only show amateurs being added to the service ...none deleted until 1994. The census/growth figures for the period 1988 through 1993 will therefore be somewhat distorted and non-comparable.

Source: FCC Licensing Facility/Gettysburg, PA

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• The FCC has a new 4-page Fact Sheet entitled "**How to Administer an Examination for a Novice Class Operator License.**" Fact Sheet PR-5000, No. 203 is available without charge from the FCC, Personal Radio Branch (1919 M St., NW; Washington, DC 20554) and (we assume) all FCC field offices. W5YI also has a 16 page booklet "**How to Administer Novice Examinations in the Amateur Radio Service**" which goes into more detail about where to get and how to select the questions, preparing (or obtaining) and administering the telegraphy exam, grading the tests, completing and mailing the FCC Form 610 ...and record keeping. The W5YI booklet is also available without charge from: P.O. Box #565101, Dallas, Texas 75356. (Include two .25 stamps to cover postage.) If you also want us to include a copy of the entire 302 question Novice pool, the cost is \$2.00 post-paid.

• The Dayton Amateur Radio Association is soliciting nominations for its three national recognition HamVention award categories. The **Special Achievement** award goes to an amateur who made an outstanding contribution to the advancement of amateur radio. This award is usually given to a well respected amateur who spearheaded a single significant event. The award for **Technical Excellence** is for an amateur who has made an outstanding technical contribution to the field of amateur radio. **Amateur of the Year** goes to a special ham who has made a long term commitment to furthering ham radio. All amateurs are eligible: Novice through Extra. Send letters of nomination (including any available documentation) to: **HamVention Awards; Box 964; Dayton, Ohio 45401.** Nominations close March 15.

• The **Foundation for Amateur Radio, Inc.**, a non-profit organization with headquarters in Washington, D.C. plans to award thirty-two scholarships for the 1989-1990 academic year to assist licensed radio amateurs. FAR, composed of fifty local area ham clubs, fully funds four of these scholarships with income from its annual Hamfest. It administers (without cost) seven QCWA and three Radio Club of America scholarships ...and eighteen others for various groups. Licensed amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in ...or have been accepted for enrollment at an accredited university, college or technical school. Some of the scholarships require at least an FCC General class license. Awards range from

\$500 to \$2000 with preference given in some cases to residents of specified geographical areas or the pursuit of certain studies. Additional information and application forms are available from: **FAR Scholarships, 6903 Rhode Island Avenue; College Park, MD 20740, ATTN: Hugh Turnbull/W3ABC**

• The League invites instructors to write papers for presentation at the **ARRL 1989 Educational Workshop.** Topics for papers, due at HQ by April 28, 1989, include all aspects of amateur radio instruction and recruiting, such as: training techniques, curriculum development, acceptance in school systems, one-on-one tutoring ...and working with our youth, seniors and the handicapped. Papers will be bound and made available at the workshop to be held at the **ARRL National Convention, Saturday, June 3, 1989, at the Arlington (Dallas/Ft. Worth, TX area) Convention Center.** An author's kit is available from: **Rosalie White/WA1STO, (ARRL, 225 Main St., Newington, CT 06111.)**

• A bill has been introduced into the current New Hampshire legislature that will enable cities and towns to **tax communciations antenna towers as real estate!** HB-243-FN, while aimed primarily at commercial and broadcast towers, includes CB/ham radio towers, backyard satellite dishes ...and even private TV antennas! The bill, authored by Rep. McRae of Hillsborough Dist. 6, has been referred to the **Ways and Means Committee.**

• In spite of overwhelming opposition, **Walt Ordway, K1DFO,** of Rancho Palos Verdes, California (site of the famous **Don Wallace/W6AM** rhomic antenna farm) has been **authorized to erect a 55-ft crank-up ham radio tower.** He had been the recipient of a vicious 3-1/2 hour yelling, out-of-control attack by local homeowners at a filled-to-overflowing city council meeting. Walt had applied for a permit for an 89-ft tower with a TH7DXX on top ...plus a 2-meter whip. The vote was 4 to 1 - the lone dissenter being the mayor who had earlier ordered Walt to remove a 2-meter repeater from his home. (Later reversed when Walt pointed out it was on his private property, not commercial ...and the mayor had no right to order him to remove his personal property from his home!) Neighbors called the antenna "an eyesore, ...a hazard ...and its size, *obscene.*" He is required to lower the antenna to 45 feet when not in use. Quoting PRB-1, Ordway argued that the FCC had ruled that local governments cannot prevent amateur radio operators from having antennas of "reasonable" height.

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W5YI REPORT

National Volunteer Examiner Coordinator

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•The *Environmental Protection Agency* has announced plans to "defer" work on development of the so-called RFPG, **radiofrequency protection guideline**. Richard Guimond, Director of the US EPA's *Office of Radiation Programs*, said efforts were stopped to formulate standards for safe public exposure to radio wave emissions due to "the need to concentrate limited staff and financial resources on issues of higher priority within US EPA ...such as the problems associated with radon gas contamination, and disposal of high-level nuclear waste." EPA has done a substantial amount of work over the past four years on what constitutes a safe RF exposure. Guimond said he would "need 3-5 additional staff and only a million dollars for one year" to issue the guidelines. Plans call for 1989 funding of EPA at last year's level ...and no funding whatsoever for 1990 and beyond. Industry maintains they need a federal RF exposure guideline to help stop the proliferation of different and conflicting state and local standards. FCC Chairman Dennis Patrick asked EPA to reconsider its decision and the agency is now considering issuing an informal "**Citizen's Guide to RF Exposure**" - similar to the one issued on radon. The City of Seattle has recently proposed to limit VHF radiofrequency fields to only 100 microwatts per square centimeter ...ten times more stringent than the current OSHA (Occupational Safety and Health Administration) standard of 1000 microwatts per square centimeter. The radio wave exposure concern stems from unsubstantiated theories that strong electromagnetic fields can damage the neurological and immune systems of humans ...and cause cancer.

IT IS TIME TO ADDRESS THE PRESENT...

Address by: Frederick O. Maia, W5YI
Miami Hamboree Industry Meeting - February 3, 1988
Presented to the **ARRL No-Code Study Committee**

I would like to talk to you this evening about a subject that is important to us all - that being the future of our hobby and our business - *Amateur Radio*. Ham Radio is certainly meaningful to us, but a more important question is, why is ham radio important to everyone else? Those in command are concerned about the public. Let's face it, the public is not very concerned about the "hobby" aspects of amateur radio.

It's important because its a communications service in times of need and disaster ...and a training ground for our future engineers and scientists. *Ham radio is a learning experience.*

There was a time when ham radio was growing. The amateur radio service increased by more than 60% in the ten year period between 1973 and 1983. Amateur radio was alive and thriving ...the annual growth rate stood at nearly 5%. Since that time, however, the number of ham operators has nosedived to an average of less than 1% growth per year. *What happened?* Two

events occurred in the early 1980's that have had a devastating impact on ham radio growth.

Our pool of communications oriented candidates dried up for one thing - and, yielding to pressure from the League and their membership, the FCC declined to adopt a class of license which would not have a Morse code requirement. *Docket 83-28* proposed in 1983 to only eliminate the code prerequisite from the Technician Class for VHF and higher frequency operation, but the proceeding was portrayed as the total abolition of code.

"*No Code*" was buried once and for all. It wasn't needed. The League published an editorial stating "It is gratifying that the FCC has entrusted us with the responsibility for seeing that amateur radio grows and develops on our terms, rather than theirs - and with the Commission's continued support, so we shall."

Well, it didn't happen. For all practical purposes ham radio growth stopped dead in its tracks in the early 1980's. While many thought that the adoption of a code-free license class would signal the beginning of the end of ham radio, I submit that not adopting that measure has had that same effect. I personally believe that if *Docket 83-28* had been approved, the 5% growth rate would have continued.

CB AND HAM RADIO...

Japan allows its amateurs access to the ham bands using low power without a Morse code requirement. They call it the '*Voice Class*.' In effect, Japan has their CB band right in the ham bands. That's enough to make any long term ham *cringe in horror* - but it provides them with a pool of candidates - many who after becoming exposed to communications and electronics - move on to a high tech career. I don't think it is coincidental that Japan produces more engineers and high technology equipment and innovations per capita than any country in the world.

When CB radio came to a halt in the United States in the early 1980's, our pool of amateur radio candidates simply dried up ...and there was nothing to replace it. There is a very close relationship between the rise of citizen's band radio in the 1970's and growth in the Amateur Radio Service.

We can talk all we want to about our controlling growth in the Amateur Radio Service, *but we never did*. Our growth was tied to the CB boom. FCC statistics show there was no growth to speak of before CB - or after its demise. Those are the facts. We ought to be down on our knees thanking the Citizen's Radio Service - instead of criticizing it. I would like to show you some interesting ham radio statistics.

[Charts shown supporting link between CB and amateur radio expansion.]

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Don't get me wrong, I am not saying we need to bring it back. *CB was mishandled from the start.* The Citizen's Band was carved out of the old eleven meter ham band - and -- contrary to intention -- it stayed a ham band, ...but without ham radio rules, training, testing, leadership, role models and peer pressure. It is not surprising that it eventually degenerated into chaos.

THE AMATEUR RADIO SERVICE TODAY...

Let's take a look at the present state of ham radio in the United States. The average age of a ham now is fifty years old - that's up from age forty-six just five years ago. Very, very few youngsters are entering ham radio. The Boy Scouts have their international headquarters in our Dallas area and they tell me today's kids are more interested in robotics, satellites and computers ...than in semaphore flag waving and Morse code. We can talk all we want to about how easy it is to learn the code, *but our youth aren't interested - and aren't doing it.*

Amateur packet and satellite communication are two currently burgeoning modes of the future. Both TAPR (*Tucson Amateur Packet Radio*) and AMSAT (*Amateur Satellite Corporation*) operators tell us the slow code requirement is a burden to their development. The Boards of both corporations have endorsed a VHF code-free entry into amateur radio.

According to the U.S. census, thirty-six percent of the population is age 24 and younger - yet FCC statistics indicate that only six percent of all licensed ham operators fall in that range. *Something appears wrong.*

Just how important is the code? Apparently not very. Try and find its commercial use by tuning across the bands. The last commercial vestige of required Morse operation, the maritime radio operator at sea, is going "QRT". Ocean going vessels will now keep in touch with the outside world more efficiently using automatic satellite communication. I think there is a message for us there.

Apparently the code isn't as important to existing ham operators either as many would like to have you believe. Just try to find a code key at this ...or any other hamfest flea market. Everyone seems to be more interested in buying and selling software, computers and other high tech paraphernalia. The times have changed and it is time we upgraded our thinking.

While an important tradition, Morse code is antiquated as a means of communication and we can't expect newcomers to share our feelings of nostalgia. I hear the code determines "quality" but there does not appear to be any relationship whatsoever between code proficiency and being a desirable person. All it does is keep the ham ranks low in number.

There was wide speculation that by giving voice privileges to newcomers that the Amateur Radio Service would grow significantly. "*Novice Enhancement*" still required that you be code proficient, but now you could operate on small segments of the ten meter, 220 and 1296 Mhz bands.

The fact remains that the code is still the code ...and a burden to newcomers. There were fewer first time amateurs in 1988 - the first full year of the enhanced Novice class than there were in 1986 - the final year before its adoption. Clearly "*Novice Enhancement*" is not working and we obviously need to take a different approach to amateur radio growth.

But now another, even more serious problem has surfaced -- the ultimate abuse to the Amateur Radio Service. Since our service is not growing ...and the need for more spectrum by other services is skyrocketing, our valuable frequencies are being taken from us.

The Amateur Radio Service is in a very vulnerable position. We have fewer licensed users per megahertz of allocated spectrum than any other U.S. radio service. It is perceived that ham radio is stagnant ...and our frequencies -- particularly at the incredibly valuable VHF/UHF range - underutilized.

It is little wonder that well-organized, well-connected and well-funded commercial interests are successfully convincing the regulators that our frequencies could be better used elsewhere. Ham band frequency attacks have become a way of life ...and we can anticipate they not only will continue, but will increase.

NEW ENTRY LEVEL CLASS FOR CANADA...

During the past couple of years, I have become aware of some very interesting amateur regulatory activities north of the border. For one thing, Canada is no longer a division of the *American Radio Relay League*. They split off from the League during the mid-1980's. Canada also does not have a beginning ham class and both their regulators and amateurs were advocating a new VHF ham radio entry.

The unique feature is the absence of a Morse code requirement. I thought that unusual since this position was supported by both of Canada's long established amateur organizations. [*Canadian "1985 Discussion Paper", CRRL/CARF joint comments, draft of RIC/24 new rules shown.*] Their entry level *Certificate "A"* will allow 30 Mhz and higher frequency operation after an applicant successfully passes training and testing on regulations, procedures and basic theory.

Morse code will still be required for high frequency operation - although they plan to reduce their 10 and 15 word-per-minute levels to 5 and 12.

There is absolutely no doubt that Canada will adopt this plan. I have a copy of a September letter from their federal regulatory agency to Canadian Radio Relay League President **Tom Atkins/VE3CDM** that clearly points out that the restructuring is definitely going to take place. Thus "no-code" coming to Canada is not just a recommendation, *it is a fact.* [Letter shown.] This letter came right on the heels of the FCC's reallocation of 2 Mhz from the 220-Mhz ham band to narrow band commercial use.

CANADIAN "CLONE" SUGGESTED FOR U.S.

Ray Kowalski was the FCC Division Chief overseeing the Amateur Radio Service before leaving the Commission after 19 years to join a private communications law firm. He also was very much involved in the last no-code proceeding. I remembered him telling me how he personally felt the Amateur Radio Service placed too much emphasis on the code. Ray also has great insight into how Washington operates.

I contacted him during late September and asked him what he thought it would take to get a similar structure adopted here in the United States. He sent me a four-page response. I added a cover letter and distributed it to about five hundred prominent amateurs, organizations and members of industry. I also enclosed a copy of my newsletter detailing the Canadian restructuring. I asked if the time was right to consider such a plan for the United States. I said I would start out an *Amateur Radio Expansion Fund* with \$1,000.

The response was immediate ...and very positive. Many people and members of industry endorsed the concept and sent in contributions to the initiative. **Don Stoner/W6TNS** said he would form an organization to support the effort and he asked me to be a director and I accepted.

I retained Ray Kowalski to represent a coalition of amateurs and members of industry seeking to implement a U.S. amateur radio structure modeled after Canada.

Although the group that Don Stoner formed never had the intention of filing any petitions, confusion developed and I have since resigned from that organization to end any misunderstandings ...and the perception that the group was competing with the League which is absolutely not the case.

On December 2nd, Ray Kowalski made a formal presentation to the FCC's Private Radio Bureau on behalf of the coalition. This presentation stressed the need for amateur radio growth and suggested a structure similar to that planned for Canada. I believe Ray will be telling you more about his presentation a little later. A copy of his report detailing his FCC presentation was distrib-

uted to interested parties - including **Dave Sumner/K1ZZ**, Executive Vice President of the *American Radio Relay League*.

ARRL NO-CODE STUDY PANEL FORMED...

Surprisingly, the week after Ray made the presentation to the FCC Private Radio Bureau, members of the ARRL's Executive Committee ...meeting in Baltimore, directed Pres. **Larry Price/W4RA** to form an *ARRL No-Code Study Committee* with members of the amateur radio industry sitting on the panel. It marks the first time in my recollection that members of industry have been asked to actively participate in League decisions and I welcome that precedent. I am prepared to support the *ARRL No-Code Study Committee* and I feel assured that their recommendations will be in the best interest for the future of amateur radio.

A black cloud looms on the horizon, however. I am concerned that the League Directors may not put as much importance in the recommendations of this committee as they do on the views of their membership. The *American Radio Relay League* is a membership organization and is committed to support their collective views.

Barry Goldwater/K7UGA - ham radio's elder statesman - called us last week and chatted about the future of ham radio. He told me to tell you folks that he was "behind the 'no code' effort 100%" and that "we live in a day of digital and other special communications. It is time to address the present..." That should be our theme song. It is time to address the present!

George Bush says he wants to be known as the "education president." Well, here is a golden opportunity for us. I asked Barry to write a letter to the Bush administration telling them that the U.S. Amateur Radio Service is a fertile training ground for our engineers, scientists and technicians ...and should be recognized as such.

Another *General World Administrative Radio Conference* will be overhauling the entire radio spectrum in a few short years. The United States - and delegations from the entire world - will be analyzing every radio service with an eye to present status ...and future needs. Already it is evident that there is not enough spectrum to go around and it is crucial that we show that ham radio is robust, needed and growing. Anything less could be very costly to us as amateur radio operators ...and to our country.

I really don't think amateur radio can survive as we know it without a 'code-free' license. Many amateurs are concerned about uncontrolled expansion, but I believe the testing function can not only control growth ...but make the license meaningful as well. Thank you.
[Address Feb. 3, 1988, 8:00 p.m. Miami Airport Hilton]