

Feed Back

VE3OSR

146.34 - 146-94



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|----------------------------|-------------------------------|
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MEETING MINUTES MAY 1982

At 8:22 VE3LPD welcomed the group and 2 guests Bernie Kuhn and Jim Singleton.

VE3LPK moved the minutes correct as printed in Feedback VE3LCZ seconded.

VE3DXO moved that the club buy a box of chocolates for the staff of the Grey Bruce Tourist Council in appreciation for the use of the meeting room. Seconded by VE3LPT. Carried. VE3BIS made a motion to purchase 2 meter repeater equipment for special events. Seconded by VE3LCZ. Motion defeated. VE3BIS Gave a talk about the upcoming RSO Convention in October. Dick also gave a talk on possible FCC changes in the American 20 MTR fone band.

Nominations from the floor were taken.

Don VE3IDS

ADDITIONAL MEMBERS

SWL Jim Singleton Box 70 Southampton NOH2L0 797-3419

VE3HFW George Ziegler RR6 Markdale NOC1H0 986-3142

NOTE: DEADLINE For submissions to the next "Feedback" will be 01 Sept 1982.

Take care and have an enjoyable summer.

73's Andy

STOP THE PRESS:*****

In place of the regular meeting there will be a boat excursion courtesy of Jim Vamplew VE3CRV. Come out a little early 7 to 7:30 PM at the Owen Sound Yacht Club On Thursday 17th June 1982. Bring a heavy sweater or light coat and a few green-backs to cover the costs of snacks etc. Talk in on OSR 146.34/.94. No advance tickets, so first come first served, come early to beat the rush.

FIELD DAY:

Date: June 26 and 27th 1982.
Time: 9:30 AM Saturday.
Place: Georgian College Grounds, Owen Sound.

Norm informs me that something new is planned and that is a field day with social. Barbeques will be available, so bring hamburg's, Hot dog's etc. Enjoy some operating and some nourishment.

Help is still needed and if you can spare some time contact.

Norm Biggar VE3MTV 376-3535
Tom Merner VE3NEM 371-9499

EDITOR

CLUB ACTIVITIES

Thanks to Jim Harron VE3BFV, for a very informative description of RTTY and an excellent demonstration of his new RTTY equipment. From the feedback that I have heard since the meeting everyone enjoyed his introduction to RTTY and you never know, maybe a few new stations will appear in the near future. Thanks Jim.

The new program Directors seem to have things in high gear and as a result of some suggestions the following agendas are in the works.

Antennae demonstration, Ant. Information ETC.

A Copy machine will be available for those who would like to make use of the references.

Trip to BNPD site.

Talk about and trip to Wiarton Airport.

Trip to Allen Park Satellite Tracking Station.

Good programs can only be achieved if good ideas are brought forward from the membership. Looks like they have a good start so lets keep the ball rolling and flood them with topics. Contact them directly or if you are too shy write them a note; addresses are on the front page.

73's
Andy VE3LCZ

AMATEUR RADIO EMERGENCY SERVICE UPDATE

The local ARES group now consists of 33 members and we have very good coverage of the area. All members ought to have the latest list and you should fill in the tone alert numbers as people are equipped with these devices. I didn't put them on the sheets as there were some changes in progress at the time.

I want to get an updated list of equipment from the members as it is some time since I made the last one. I'm particularly interested in handheld and portable equipment that has significantly changed or been purchased since you last reported.

Everyone should now have some type of portable antenna for two metres that can be fed with twenty or thirty feet of coax and pulled up in a tree for better coverage. A rubber duck will not always be sufficient to get you into the repeater.

A spare multiband dipole should be available for emergencies too and the G5RV is likely the simplest to make although a trap dipole is a good investment too.

All members should now be capable of handling traffic and if there is anyone who is not, he should listen to the Ontario Phone Net to see how it is done on voice or the Grey-Bruce Net for CW operation.

Tess and I plan to operate the home station on the Field Day weekend this year for a change. We proved that two or three people can put a station on the air easily for 24 hours and make a good score so why not get out there and do it in small groups instead of mounting a big logistics operation with masses of people who generally contribute little to the operation and are only there for the beer and to get their name in the list of operators.

Dick, VE3BIS has tone alerts available and there should be one in the city of Owen Sound so I hope one member up there gets one soon. I'd like more members to call in to the ARES Nets each month we have some who signed up and have not called in this year yet. If anyone feels that an exercise would be beneficial, let me know or contact VE3BFV in Kemble or VE3LCZ in Port Elgin.

If any of the members need copies of the ARRL message forms I can get them on request.

Bill Hardie VE3EFX

The Countries List Revisited

BY JOHN A. ATTAWAY*, K4IIF

In the October 1972 issue, page 81, *CQ* published an article by K4IIF entitled "These Things We Call Countries, What Are They?" This article was written partly as an aid to DXers in explaining the over 300 countries on the ARRL Countries list to non-DXers and non-amateurs, and partly as an independent examination of the criteria used to define countries for DX Award purposes. *CQ* bases its own Countries Awards, the C.W. DX Award and the S.S.B. DX Award, on the A.R.R.L. Countries List.

Almost 10 years have gone by since we researched the original article, and Dick Ross, K2MGA, *CQ*'s intrepid publisher, indicated that a new article looking at the changes in the list and in DX country philosophy over the past decade would be in order.

There continues to be a wide disparity today, both in size and population, of the amateur radio countries. They vary in area from the almost 5,000,000 square miles making up the Asiatic Russian Soviet Federated Socialist Republic (Siberia) to the 0 square miles of I.T.U., Geneva, and the United Nations, New York, and in population from the almost 1 billion people of the Peoples Republic of China to the totally uninhabited islands such as Aves, Bajo Nuevo, Clipperton, Desecheo, Kingman Reef, Malpelo, Navassa, Serrana Bank, and others. However, some of the uninhabited (and uninhabitable) spots such as Minerva Reef, Blenheim Reef, and Geyser Reef, which are not administered by any government, have now been deleted from the active list.

The deletion of unadministered areas is one of the major changes which the League has made in the Countries List since 1972. The official Countries List Criteria, quoted directly from the official ARRL DXCC List, are as follows:

Countries List Criteria

The ARRL Countries List is the result of some 38 years of progressive changes in DXing. The full list will not necessarily conform completely with these criteria since some listings were set up and recognized from pre-WWII. While the general policy has remained the same, specific mileages and additional points have, over the past 17 years, been added to the criteria. The specific mileages in Point 2(a) and Point 3, mentioned in the following, have been used in considerations made in April 1960, and after. The specific mileage in Point 2(b) has been used in considerations made in April, 1963, and after.

Any land area in the world, with the exception of such land that would come under Points 4 and 5, can be placed in one or more of the

following categories. Where the area in question meets at least one of the points in the criteria it may be considered eligible as a separate entity, i.e. a country, for our Countries List.

1) *Government*: An area by reason of Government constitutes a separate entity.

2) *Separation by water*: An island or a group of islands, not having its own government, is considered as a separate entity under the following conditions:

(a) Islands situated off shore from their governing area must be geographically separated by a minimum of 225 miles of open water. This point is concerned with islands off shore from the mainland *only*. This point is *not* concerned with islands which are part of an island group or are geographically located adjacent to an island group.

(b) Islands forming part of an island group or which are geographically located adjacent to an island, or island group, which have a common government, will be considered as separate entities provided there is at least 500 miles of open water separation between the two areas in question.

3) *Separation by foreign land*: In the case of a country, such as that covered by Point 1, which has a common government but which is geographically separated by land which is foreign to that country, if there is a complete separation of the country in question by a minimum of 75 miles of foreign land, the country is considered as two separate entities. This 75 miles of land is a requirement which is applicable to land areas *only*. In cases of areas made up of a chain of islands, there are no minimum requirements concerned with the separation by foreign land.

4) *Unadministered area*: Any area which is unadministered will not be eligible for consideration as a separate entity.

5) (a) Any area which is classified as a Demilitarized Zone, Neutral Zone or Buffer Zone will not be eligible for consideration as a separate entity.

(b) Embassies, consulates and extraterritorial monuments will not be eligible for consideration as a separate entity from the host country.

Of these criteria, numbers 4 and 5 have been added since 1972. Criteria 4 led to the deletion of Minerva, Blenheim, and Geyser Reefs, as mentioned above, while criteria 5 led to the deletion of the Kuwait/Saudi Arabia Neutral Zone, although the Saudi Arabia/Iraq Neutral Zone remains on the list as of the date of this writing.

Another major change involves the status of the Federal Republic of Germany and the German Democratic Republic. Prior to Sept. 17, 1973, these were treated as one country, but today they are recognized as separate countries. However, in a related situation, the Republic of Korea (South Korea) and the Democratic People's Republic of Korea (North Korea) are still treated as one country.

For us old timers, the Countries List always began with AC3-Sikkim, AC4-Tibet and AC5-Bhutan, and it doesn't seem right without them. However, Sikkim is now considered part of India, AC4 is part of China, and AC5 has just become A5. Other old stalwarts now gone the way of a changing world are KS4-Swan Island, now a possession of Honduras and no longer eligible for separate country status, and KZ5-Canal Zone, now part of Panama.

In the preamble to the criteria it is pointed out that "the specific mileages in Point 2(a) and Point 3 have been used in considerations made April, 1960 and after. The specific mileage in Point 2(b) is being used in considerations made in and after April, 1963." Therefore the full list does not conform to these specific criteria, some countries being traditionally listed since before World War II. Examples are Corsica and the Balearic Islands, a Department of Metropolitan France and a Province of Spain, respectively, which are considered separate entities even though they are much less than 225 miles off shore as required by 2(a).

In the 1972 article we divided the countries into 5 classes depending on the degree to which each of them possessed the attributes of area, population, and governmental system which the world community requires of a country. A sixth class was added for deleted countries, but we are eliminating this class. The 5 classes of countries are defined as follows:

Class 1 Country - Generally recognized as a complete and independent country by the world community.

Class 2 Country - A fully developed entity with most of the characteristics of a Class 1 Country. Most Class 2 Countries may be described as either states, associated states, provinces, departments, or as Soviet Socialist Republics.

Class 3 Country - An entity with the necessary area and population to become a Class 1 or 2 Country after it matures economically and/or politically. Many Class 3 Countries have Territorial type governments with varying degrees of local rule.

Class 4 Country - An entity with sufficient area and/or population to become a Class 1 or 2 Country, but which has very little potential to actually move up the ladder. Many Class 4 Countries are islands too barren and inhospitable to support a permanent population.

(Text continued on page 75.)

Prefix	Country	Continent	Form of Government	Area in Square Miles	Permanent Population	Country	Zone
A2, Z50	Boswata	AF	Republic	231,805	800,000	1	38
A3	Tonga	OC	Constitutional Monarchy	270	100,000	1	32
A4	Oman	AS	Sultanate	82,029	800,000	1	21
A5, A05	Bhutan	AS	Monarchy	18,147	1,300,000	1	22
A6	United Arab Emirates	AS	Emirate	32,278	800,000	1	21
A7	Qatar	AS	Emirate	4,402	200,000	1	21
A8	Bahrain	AS	Emirate	258	400,000	1	21
A9	Pakistan	AS	Republic	310,403	86,500,000	1	21
BV	Taiwan	AS	Republic	13,885	17,800,000	1	24
BY	China	AS	Communist	3,691,523,975	1,000,000,000	1	23, 24
C2, VK8	Nauru	OC	Republic	8	7,000	1	31
C3, PK	Andorra	EU	Co-Principality	175	24,000	1	14
C5, /13	The Gambia	AF	Republic	4,351	600,000	1	35
C6, /P7	Bahamas	NA	Commonwealth	5,382	200,000	1	8
C7, C17	Mozambique	AF	Peoples Republic	302,330	10,300,000	1	37
C8	Chile	SA	Republic	292,258	11,300,000	1	12
C89, F88, KC4	Antarctica	Antarctica	12 Nation Treaty	5,100,000	0	3	12, 13, 38, 39, 29, 30, and 32
LA, LU, OH4, UAI, VK8, VP8, ZL5, ZS1, 3Y, 4K, 3J, CEBA	Easter Island	SA	Administered by Chile	63	1,598	3	12
CEB8	San Felix & San Antonio Islands	SA	Administered by Chile	3	0	4	12
CEBZ	Juan Fernandez Island	SA	Administered by Chile	56	615	3	12
CM, CO	Cuba	NA	Communist	44,218	10,000,000	1	8
CN	Morocco	AF	Constitutional Monarchy	172,414	21,000,000	1	33
CP	Bolivia	SA	Republic	424,163	5,300,000	1	10
CR9	Macao	AS	Provincial	6	270,000	2	24
CT1	Portugal	EU	Corporate Republic	34,309	9,900,000	1	14
CT2	Azores Islands	EU	Provincial	893	330,000	2	14
CT3	Madeira Islands	AF	Provincial	308	275,000	2	33
CX	Uruguay	SA	Republic	72,173	2,929,005	1	13
D2, 3	Angola	AF	Peoples Republic	481,354	6,700,000	1	36
D4	Rep. of Cape Verde	AF	Republic	1,557	300,000	1	35
D6	Comoros	AF	Islamic Republic	838	300,000	1	39
DA, DF, DJ, DK, DL	Fed. Republic of Germany	EU	Republic	95,961	61,100,000	1	14
DM, Y2-Y9	German Democratic Republic	EU	Communist	41,267	16,700,000	1	14
DU, DX	Philippines	OC	Republic	115,830	47,700,000	1	27
EA	Spain	EU	Monarchy	194,984	37,800,000	1	14
EAG	Balearic Islands	EU	Provincial	1,936	530,000	2	14
EAB	Canary Islands	AF	Provincial	2,208	950,000	2	33
EAG	Cuba & Melilla	AF	Part of Metropolitan Spain	82	155,000	3	33

Prefix	Country	Continent	Form of Government	Area in Square Miles	Permanent Population	Country	Zone
EI	Ireland	EU	Republic	27,136	3,340,000	1	14
EL	Liberia	AF	Republic	43,000	1,900,000	1	35
EP	Iran	AS	Constitutional Monarchy	623,293	38,500,000	1	21
ET	Ethiopia	AF	Military	471,776	32,600,000	1	37
F	France	EU	Republic	211,207	53,600,000	1	14
FB	Grozet	AF	Territorial*	60	0	4	39
FBW	Islands	(46°S, 52°E)	Territorial*	2,700	0	3	39
FBX	Kerguelen Islands	AF	Territorial*	38	0	4	39
FBZ	Amsterdam & St. Paul Islands	AF	Territorial*	3,368	280,000	2	15
FC	Corsica	EU	Departmental**	867	350,000	2	8
FG7	Guadeloupe	NA	Departmental**	20	6,000	3	8
FG, FS	St. Martin	(16°N, 61°W)	Administered from Guadeloupe	7,300	110,000	3	32
FH	Mayotte	(18°N, 63°W)	Territorial*	425	360,000	2	8
FK8	New Caledonia	(13°S, 45°E)	Departmental**	2	0	4	7
FM7	Marinique	(22°S, 166°E)	Administered from French Polynesia	1,500	110,000	3	32
F08	Clipperton Island	(15°N, 61°W)	Territorial*	93	5,000	3	5
F08	French Polynesia	OC	Administered from Reunion Is.	1	0	4	39
FP8	St. Pierre & Miquelon Islands	(18°S, 148°W)	Territorial*	969	472,000	2	39
FR	Guilfo	(47°N, 56°W)	Administered from Reunion Is.	106	9,900	3	32
FR	Islands	(12°S, 47°E)	Administered from Reunion Is.	35,135	43,000	2	9
FR	Juan de Nova Islands & Europa	(16°S, 43°E)	Administered from Reunion Island	50,332	50,000,000	1	14
FR	Reunion Island	(21°S, 55°E)	Departmental**	227	50,000	2	14
FR	Tromelin Island	(16°S, 54°E)	Administered from Reunion Island	5,462	1,600,000	1	14
FW8	Wallis & Futuna Islands	(13°S, 177°W)	Territorial*	45	64,500	2	14
FY7	French Guiana	SA	Departmental**	30,514	5,500,000	1	14
G	England*	EU	Constitutional Monarchy	24	45,000	2	14
GD	Isle of Man	EU	Self-governing Dependency of U.K.	8,016	2,774,000	1	14
GI	Northern Ireland	(54°N, 5°W)	Constitutional Monarchy	11,500	200,000	1	28
GJ, GC	Jersey**	EU	Self-governing Dependency of U.K.	35,919	10,800,000	1	15
GM	Scotland**	EU	Constitutional Monarchy	15,941	6,353,000	1	14
GU, GC	Guernsey & Dependencies	EU	Self-governing Dependency of U.K.	15,941	6,353,000	1	14
GW	Wales**	EU	Self-governing Dependency of U.K.	109,484	8,000,000	1	10
H4, VR4	Solomon Islands	OC	Parliamentary	2,869	3,000	3	10
HA, HG	Hungary	(10°S, 160°E)	Communist				
HB	Switzerland	EU	Federal Republic				
HE	Liechtenstein	EU	Principality				
HC	Ecuador	SA	Republic				
HCB	Galapagos Islands	SA	Administered by Ecuador				

Prefix	Country	Continent	Form of Government	Area in Square Miles	Permanent Population	Country	Zone
HH	Haiti	NA	Republic	10,714	5,800,000	1	8
HI	Dominican Republic	NA	Republic	18,816	5,400,000	1	8
HK	Columbia	SA	Republic	439,737	26,700,000	1	9
HK0	Bajo Nuevo	NA	Administered by Columbia	0.14	0	5	8
HK0	Malpelo Island	SA	Administered by Columbia	1.1	0	5	8
HK0	San Andres & Providencia Islands	NA	Administered by Columbia	16	8,000	3	7
HL, HM	North Korea*	AS	Communist	46,540	19,000,000	1	25
HL, HM	South Korea*	AS	Republic	38,022	37,600,000	1	25
HP	Panama	NA	Republic	29,209	1,900,000	1	7
HR	Honduras	NA	Republic	43,277	3,800,000	1	7
HS	Thailand	AS	Constitutional Monarchy	198,457	47,300,000	1	26
HV	The Vatican	EU	Theocracy	0.17	1,000	1	15
HZ, FZ	Saudi Arabia	AS	Monarchy	830,000	8,200,000	1	21
I, IT	Italy & Sicily	EU	Republic	116,304	57,200,000	1	15
IS, IM	Sardinia	EU	Regional	9,301	1,500,000	2	15
JZ, FLB	Gilbert	AF	Parliamentary	8,494	400,000	1	37
J3, VP2G	Grenada & Dependencies	NA	Parliamentary	133	100,000	1	8
J5, CR3	Guinea-Bissau	AF	Republic	13,948	600,000	1	35
J6, VP2L	Si. Lucia	NA	Parliamentary	238	100,000	1	8
J7, VP2D	Dominica	NA	Commonwealth	290	100,000	1	8
JA-JN, KA	Japan	AS	Constitutional Monarchy	142,813	116,200,000	1	25
JD, KA1	Minami Torishima*	OC	Administered by Japan	1	0	4	27
JD, KA1	Ogasawara*	AS	Administered by Japan	42	200+	3	27
JT	Mongolia	AS	Communist	604,250	1,700,000	1	23
JW, LA/P	Svalbard	EU	Administered by Norway	23,957	1,200	4	40
JX, LA/P	Jan Mayen	EU	Administered by Norway	150	0	4	40
JY	Jordan	AS	Constitutional Monarchy	37,738	3,200,000	1	20
K, W, N, A	United States of America	NA	Republic	3,615,221	225,504,825	1	3, 4,
KB, KH1	Baker and Howland Islands	OC	Administered by US	1	0	4	31
KC4, KP1	Navassa Island	NA	Administered by US	0.5*	0	5	8
KC6	Eastern Caroline Islands*	OC	UN Trust Territory Under US Administration	216	40,000	3	27
KC6	Western Caroline Islands*	OC	UN Trust Territory Under US Administration	232	16,000	3	27
KG4	Guantanamo Bay	NA	US Naval Base in eastern Cuba*	-	-	5	8
KG6, KH2	Guam	OC	UN Trust Territory under US administration	212	126,000	2	27
KG6R, S, T, KH0	Mariana Islands*	OC	Territorial*	184	10,000	3	27
XH6	Hawaiian Islands	OC	Territory under US administration	6,450	920,000	2	31

Prefix	Country	Continent	Form of Government	Area in Square Miles	Permanent Population	Country	Zone
KH7	Kure Island**	OC	Administered by US*	1	0	5	31
KJ6, KH3	Johnston Island	OC	Administered by US	1	155	4	31
KL7	Alaska State	NA	Administered by US	586,412	405,000	2	1
KM6, KH4	Midway Island	OC	Administered by US	2	2,356	3	31
KP4	Puerto Rico	NA	Commonwealth*	2,435	3,500,000	2	8
KP4	Descecho	NA	Administered by US	2	0	5	8
KP6, KH5K	Kingman Reef	OC	Administered by US	1/2	0	5	31
KP6	Palmyra & Jarvis Island	OC	Administered by US	6	0	4	31
KS4B, KP3, KH0	Serrano Band & Roncador Cay	NA	Administered by US and Columbia	1/2	0	5	7
KS6, KH8	American Samoa	OC	Territorial**	76	26,000	3	37
KV4, KP2	US Virgin Islands	NA	Territorial**	133	95,214	2	8
KW6, KH9	Wake Island	OC	Administered by US	3	1,097	3	31
KX6	Marshall Islands	OC	UN Trust Territory under US Administration*	70	18,925	3	31
LA, LB, LF, LG, LJ	Norway	EU	Constitutional Monarchy	125,182	4,100,000	1	14
LU	Luxembourg	EU	Republic	1,072,073	27,100,000	1	13
LX	Argerlina	EU	Constitutional Monarchy	998	400,000	1	14
LZ	Belgium	EU	Constitutional Monarchy	42,823	8,900,000	1	20
DA	Paru	SA	Communist	496,225	17,600,000	1	10
OD5	Lebanon,	AS	Republic	4,015	3,200,000	1	20
OE	Austria	EU	Republic	32,374	7,460,000	1	15
OH, OF	Finland	EU	Republic	130,120	4,773,000	1	15
OH0	Aland Islands	EU	Provincial**	570	21,000	2	15
OJ0	Markel Reef*	EU	Administered by Finland	1	0	5	15
OK	Czechoslovakia	EU	Dictatorship	46,371	15,400,000	1	15
ON	Belgium	EU	Constitutional Monarchy	11,781	9,900,000	1	14
OX, XP	Greenland	NA	Provincial**	840,000	54,000	2	40
OY	Faeroe Islands	EU	Territorial**	540	39,000	2	14
OZ	Denmark	EU	Constitutional Monarchy	16,829	5,100,000	1	14
PA	Papua New Guinea	OC	Parliamentary	176,260	3,200,000	1	28
PD, PE, PI	Netherlands	EU	Constitutional Monarchy	13,961	14,100,000	1	14
PJ	Netherlands Antilles**	SA	Territorial**	337	200,000	3	9
PJ	St. Maarten, Saba, & St. Eustatius	NA	Territorial**	34	20,000	3	8
PY	Brazil	SA	Republic	3,266,488	122,000,000	1	11
PY0	Fernando de Noronha	SA	Territorial	10	3,000	3	11
PY0	St. Peter & St. Paul Rocks	SA	Administered by Brazil	17,100	0	5	11
PY0	Trindade & Martin Vaz Islands	SA	Administered by Brazil	4	0	4	11
PZ	Surinam	SA	Parliamentary	63,039	416,000	3	8
S2	Bangladesh	AS	People's Republic	55,126	90,600,000	1	29
S7, V09	Seychelles	AF	Republic	145	100,000	1	30
S9, CR5	Sao Tome & Principe	AF	Democratic Republic	372	100,000	1	35
SK, SL, SM	Sweden	EU	Constitutional Monarchy	173,866	8,300,000	1	14

Prefix	Country	Continent	Form of Government	Area In Square Miles	Permanent Population	Country	Zone
SP, 3Z	Poland	EU	Communist	120,665	35,500,000	1	15
ST2	Sudan	AF	Republic	967,600	15,200,000	1	34
STB	Southern Sudan	AF	Republic	386,652	42,100,000	3	34
	Egypt	AF	Departmental	3,217	483,258	2	20
SV	Dodecanese Islands (Greece)	EU	Departmental	1,028	123,021	2	20
	Greece	EU	Constitutional Monarchy	50,944	9,600,000	1	20
SV	Mount Athos	EU	Theocracy	206	2,700	1	20
T2, VR8	Tuvalu	OC	Parliamentary	9.5	10,000	1	31
T31, VV1	Central Kiribati (Brit. Phoenix Islands) (5°S, 172°E)	OC	Republic	34	1,000	2	31
T30, VV1	West Kiribati (Gilbert & Ocean Is.) (0°-174°E)	OC	Republic	342	52,000	2	31
T32, VR3	East Kiribati (Line Islands) (2°N, 157°W)	OC	Republic	200	1,000	2	31
TA	Turkey	EU & AS	Republic	301,382	36,144,000	1	20
IF	Iceland	EU	Republic	39,762	228,000	1	40
IG	Guatemala	NA	Republic	42,042	7,000,000	1	7
FI	Costa Rica	NA	Republic	19,575	2,200,000	1	7
TI8	Cocos Island	NA	Administered by	10	0	4	7
	By Costa Rica						
TJ	Cameroon	AF	Republic	183,569	8,500,000	1	35
TL	Central African Republic	AF	Republic	240,335	2,200,000	1	35
TN	Congo Republic	AF	Republic	132,047	1,600,000	1	35
TR	Gabon Republic	AF	Republic	103,347	600,000	1	35
TT	Chad Republic	AF	Republic	495,755	4,500,000	1	35
TU	Ivory Coast	AF	Republic	124,504	8,000,000	1	35
TY	Benin	AF	Republic	43,484	3,600,000	1	35
TZ	Mali Republic	AF	Republic	478,757	6,600,000	1	35
UA, UK, UV, UW, UWX, 3, 4, 6	European Russian (SFSR)	EU	Communist	1,544,632	100,000,000*	1	15
UA1	Franz Josef Land	EU	Administered by Russia	8,000	0	4	40
UA2, UK2F	Kaliningradsk	EU	Regional*	5,361	620,000	3	15
UA, UK, UV, UWS, 8	Asian Russian (SFSR)	AS	Regional	4,956,868	25,000,000	3	17, 18, 19 & 23
UB, UK, UT, UYS	Ukrainian SSR	EU	Communist SSR**	233,090	45,966,000	2	16
UC2, UK2A/C/H, L/O/S/W	Belorussian SSR (White Russia)	EU	Communist SSR**	80,155	8,744,000	2	16
UD6, UK6C/D/K	Azerbaijdzhan	AS	Communist SSR**	33,436	4,802,000	2	21
UD6, UK6G	Georgia	AS	Communist SSR**	26,911	4,611,000	2	21
UH8, UK8H	Armenia	AS	Communist SSR**	11,500	2,253,000	2	21
UI8, UK8I	Turkmenian	AS	Communist SSR**	188,456	1,965,000	2	17
UI8, UK8J	Uzbek	AS	Communist SSR**	173,592	10,896,000	2	17
UI8, UK8L/R	Tadzhik	AS	Communist SSR**	55,251	2,654,000	2	17
UI7, UK7L	Kazak	AS	Communist SSR**	1,048,306	12,413,000	2	17
UM6, UK6M/N	Kirghiz	AS	Communist SSR**	76,641	2,748,000	2	17
UJ5, UK50	Moldavia	EU	Communist SSR**	13,072	3,425,000	2	16
UF2, UK2P/B	Lithuania	EU	Communist SSR**	25,174	3,025,000	2	15
UO2, UK2O/G	Latvia	EU	Communist SSR**	24,595	2,885,000	2	15
UR2, UK2R/T	Estonia	EU	Communist SSR**	17,413	1,294,000	2	15
VE, VO, VY	Canada	NA	Constitutional Monarchy†	3,851,809	24,000,000	1	1, 2, 3, 4, 5
VE1	Sable Island	NA	Administered by Canada	-	-	5	5
VE1	St. Paul Island	NA	Administered by Canada	-	-	5	5
VK, AX	Australia (Inc. Tasmania)	OC	Constitutional Monarchy**	2,967,909	14,600,000	1	29, 30

Prefix	Country	Continent	Form of Government	Area In Square Miles	Permanent Population	Country	Zone
VK	Lord Howe Island	OC	Administered by Australia**	5	265	3	30
VK4, VK9	Willis Island	OC	Administered by Australia	1	3	4	30
VK8	Christmas Island	OC	Administered by Australia	55	3,000	3	28
VK9	Cocos Islands (Cocos-Keeling)	OC	Administered by Australia	5	1,000	3	29
VK9	Melish Reef	OC	None	0	0	5	30
VK9	Norfolk Island	OC	Administered by Australia	13	1,000	3	32
VK0	Heard Island & Macdonald Islands	AF	Administered by Australia	140	0	4	39
VK0	Islands	OC	Administered by Australia**	42	0	4	30
VP1, V3	Belize	NA	British Crown Colony**	8,857	127,000	2	7
VP2A, V2	Antigua, Barbuda	NA	Constitutional Monarchy*	172	67,000	2	8
VP2E	Anguilla	NA	Constitutional Monarchy*	35	5,500	2	8
VP2K	St. Kitts & Nevis	NA	Constitutional Monarchy**	101	70,000	2	8
VP2M	Montserrat	NA	British Crown Colony	38	15,000	3	8
VP2S, J8	St. Vincent & Dependencies	NA	Parliamentary Colony	150	100,000	1	8
VP2V	British Virgin Islands	NA	British Crown Colony	59	10,000	3	8
VP5	Turks & Caicos Islands	NA	British Crown Colony	166	6,000	3	8
VP8, LU	Falkland Islands (Isles Malvinas)	SA	British Crown Colony	4,700	2,172	3	13
VP8, LU-Z	South Georgia Islands	SA	British Administration**	1,450	1,329	3	13
VP8, LU-Z	South Orkney Islands	SA	(Claimed by Argentina)	400	0	4	13
VP8, LU-Z	South Sandwich Islands	SA	Antarctic Territories (Claimed by Argentina)	130	0	4	13
VP8, LU-Z	South Shetland Islands	SA	Antarctic Territories (Claimed by Argentina)	0	0	4	13
VP9	Serrania	NA	British Crown Colony	21	53,000	3	5
VO9	Chagos Island	AF	Territorial**	60	1,048	3	39
VR6	Pitcairn Island	OC	Territorial**	2	90	3	32
VSS	Brunei	OC	Sultanate	2,226	129,000	1	28
VSS	Hong Kong	AS	British Crown Colony	398	4,204,000	3	24
VS6	Kamran Island	AS	Part of	28	2,200	3	21
VS9K	Andaman & Nicobar Islands	AS	Southern Yemen Territorial**	3,200	54,000	3	26
VU7	India	AS	Republic	1,261,817	676,200,000	1	22
VU7	Laccadive Islands	AS	Territorial**	11	24,000	3	22
XE, XF, AA, 6D	Mexico	NA	Republic	761,602	68,200,000	1	5
XF4, 6D4	Revilla Gigudo	NA	Administered by Mexico	320	0	4	6

Prefix	Country	Continent	Form of Government	Area In Square Miles	Permanent Population	Country	Zone
XI	Volta Republic (Upper Volta)	AF	Republic	105,659	6,900,000	1	35
XU	Kampuchea	AS	Communist	69,898	6,000,000	1	26
XV5	Vietnam	AS	Communist	128,402	53,300,000	1	26
XW6	Laos	AS	Republic	91,429	3,700,000	1	26
XZ	Burma	AS	Republic	251,790	28,087,000	1	26
YA	Afghanistan	AS	Constitutional Monarchy	250,000	15,900,000	1	21
YB, YC	Indonesia	OC	Republic	735,272	144,300,000	1	28
YI	Iraq	AS	Republic	167,925	13,200,000	1	21
YJ, FUB	Vanuatu	OC	Parliamentary	5,700	90,000	3	32
YK	(New Hebrides)	(16°S, 168°E)	Republic	71,498	6,600,000	1	20
YN, HT	Syria	AS	Republic	50,193	2,800,000	1	7
YD	Nicaragua	NA	Republic	91,699	22,300,000	1	20
Y0	Rumania	EU	Communist	8,250	4,800,000	1	7
Y1	El Salvador	NA	Republic	98,766	22,400,000	1	15
YU, YT	Yugoslavia	EU	Communist	352,145	13,900,000	1	9
YV, 4M	Venezuela	SA	Republic	1	0	4	8
YV6	Aves Island	NA	Administered by Venezuela	11,100	2,700,000	1	15
ZA	Albania	EU	Communist	2.3	26,000	3	14
ZB2	Gibraltar	EU	British Crown Colony	47	5,000	3	36
ZD7	St. Helena Island	AF	Territorial ¹	34	430	3	36
ZD8	Ascension Island	AF	Territorial ¹	81	300	3	38
ZD9	Tristan da Cunha & Gough Islands	AF	Territorial ¹	150,333	7,400,000	1	38
ZE, Z2	Zimbabwe	AF	Republic	100	9,000	3	8
ZF1	Cayman Islands	NA	British Crown Colony	93	21,000	3	32
ZK1	So. Cook Islands	OC	Dependency ²	2	32	3	32
ZK1	No. Cook Islands	OC	Dependency ²	100	5,000	3	32
ZK2	Niue Island	OC	Dependency of New Zealand	103,736	3,200,000	1	32
ZL	New Zealand	OC	Constitutional Monarchy ⁴	250	0	4	32
ZL	Auckland & Campbell Islands	OC	Administered by New Zealand	400	500	3	32
ZL	Chatham Islands	OC	Administered by New Zealand	13	8	4	32
ZL	Kermadec Islands	OC	Administered by New Zealand	4	2,000	3	31
ZM7	Tokelau Islands	OC	Administered by New Zealand ⁴	157,048	3,300,000	1	11
ZP	Paraguay	SA	Republic	471,445	28,400,000	1	38
ZS1, 2, 4, 5, 6	South Africa	AF	Republic	180	0	4	38
ZS2	Prince Edward & Marion Islands	AF	Administered by South Africa	318,261	638,000	2	38
ZS3	Southwest Africa (Namibia)	AF	Dependency of South Africa ⁵	0.0003	80	1	14
YAP ⁶	Sovereign Military Order of Malta	EU	Theocracy	1.5	0	4	26
IS ⁷	Sprally Islands	AS	Claimed by China, Viet Nam & The Philippines ⁸	0.58	25,000	1	14
3A	Monaco	EU	Principality				

Prefix	Country	Continent	Form of Government	Area in Square Miles	Permanent Population	Zone
9N1	Nepal	AS	Constitutional Monarchy	54,362	14,000,000	22
9O5, 005	Zaire (Formerly Republic of the Congo)	AF	Republic	905,568	23,300,000	36
9U5	Burundi	AF	Republic	10,747	4,500,000	36
9V	Singapore	AS	Republic	224	2,400,000	28
9X5	Rwanda	AF	Republic	10,169	5,100,000	36
9Y4, VP4	Trinidad/Tobago	SA	Constitutional Monarchy ^a	1,980	1,200,000	9
	Abu Ali, Jabal al Taif	AS (16°N, 42°E)	None			21
	Bienheim Reef	AF (4°S, 73°E)	None	0	0	39

Large-size wall chart of DX Countries available from CQ Magazine. See page 118.

Class 5 Country - No potential to become a Class 1 or 2 Country. Many Class 5 Countries are small uninhabited islands which are incapable of sustaining a population on even a temporary basis.

In the following table we have attempted to add to your knowledge of the amateur radio countries by furnishing data on locations, forms of government, estimated area, estimated permanent population, Class of Country by the CQ definitions, and zone for WAZ. For island countries, latitude and longitude have been added to help you pinpoint them on your maps. Footnotes have been used generously to provide further information on interesting points without unduly complicating the tables. We do not consider ourselves to be political scientists and have relied on standard encyclopedias for information on form of government, area, and population. Maps published by the National Geographic Society were indispensable in locating countries, and in some cases were our best source of estimates of country area. A dash in the area or population column indicates that figures were not available from any of our sources.

Our final tally shows 156 entities which definitely are countries (Class 1), 56 economically and politically developed entities which are almost countries (Class 2), 68 entities with a definite potential to become countries (Class 3), 32 entities with only slight potential to become countries (Class 4), and 14 entities with virtually no

possibility of becoming countries (Class 5).

Footnotes

- ¹Described by references as government without elected representatives, or if a legislative body exists it is totally subservient to Communist Party leadership. Governmental policy is dictated by Communist Party officials and tight police control is maintained to eliminate or suppress political opposition.
- ²Nominal allegiance to President of France and Spanish Bishop of Urgel as "Co-Princes."
- ³Scientists and military personnel rotated on a regular basis are not counted.
- ⁴Overseas Province of Portugal. Inhabitants are Portuguese citizens.
- ⁵The Balearic Islands are a Province of mainland Spain, about 60 miles off-shore.
- ⁶The Canary Islands make up two Provinces of Spain.
- ⁷Two Spanish enclaves just across the Straits of Gibraltar in N.W. Africa.
- ⁸Overseas Territory of France.
- ⁹About 180-360 scientists are rotated annually through the French Southern and Antarctic Territories.
- ¹⁰A Department of Metropolitan France, 100 miles from the mainland.
- ¹¹Overseas Department of France.
- ¹²One of four countries comprising the United Kingdom of Great Britain and Northern Ireland.
- ¹³French is the official language on Jersey Island.
- ¹⁴Bajo Nuevo consists of a sandbar about 30 feet wide.
- ¹⁵Malpelo consists of a large rock rising to 845 feet above the sea. Landing is extremely hazardous and serious accidents have occurred.
- ¹⁶The Country List does not recognize the establishment of separate governments in North and South Korea.
- ¹⁷The area of Vatican City is 108.7 acres.
- ¹⁸Formerly the Bonin and Volcano Islands.
- ¹⁹Formerly called Marcus Island.
- ²⁰Navassa Island is a rocky island with a lighthouse.
- ²¹Major islands are Truk and Ponape which are two of the six separately administered districts in the UN Trust Territory of the Pacific.
- ²²Major islands are Palau, Yap, Uliithi, and Peleliu. Palau and Yap are two of the six separately administered districts in the Trust Territory.
- ²³The base is administered according to the terms of a U.S.-Cuban treaty which can only be terminated by mutual consent.
- ²⁴Guam has locally elected government, and residents are U.S. citizens.
- ²⁵Principal islands are Rota, Saipan, and Tinian.
- ²⁶According to the National Geographic Society, Kure Island is part of Hawaii. However, the Midway Islands lie between Kure and the remainder of Hawaii. Midway is independent of Hawaii, thus con-

stituting intervening territory under Rule 3.

- ²⁷Puerto Rico is a self-governing Commonwealth under the U.S. flag. Puerto Ricans are U.S. citizens.
- ²⁸American Samoans are nationals but not citizens of the U.S.
- ²⁹Natives of the U.S. Virgin Islands are U.S. citizens.
- ³⁰The Marshall Islands are one of the administrative districts in the UN Trust Territory of the Pacific.
- ³¹One of the 12 Provinces of Finland.
- ³²Not shown on National Geographic Society map of Scandinavia.
- ³³A Province of Denmark.
- ³⁴Self-governing Danish territory.
- ³⁵Includes the islands of Aruba, Curacao, and Bonaire.
- ³⁶Self-governing Dutch territory.
- ³⁷Population figures for various sub-divisions of the USSR vary widely between references.
- ³⁸Part of the European Russian SFSR.
- ³⁹The USSR is composed of 15 associated soviet socialist republics under one central government in Moscow. Each of these republics could potentially be a Class 1 country.
- ⁴⁰The U.S. does not recognize the Soviet conquest of Lithuania, Latvia, and Estonia in 1940 and considers each of these three countries to be independent.
- ⁴¹Area and population of Sable Island and St. Paul Island are not shown in our references.
- ⁴²Under British Crown.
- ⁴³Administered by New South Wales.
- ⁴⁴Administered from Tasmania.
- ⁴⁵Steps toward independence have been initiated.
- ⁴⁶One of the West Indies Associated States, under the British Crown.
- ⁴⁷Administered from the Falkland Islands.
- ⁴⁸Part of the British Indian Ocean Territories.
- ⁴⁹British territory administered from Fiji.
- ⁵⁰Governed by India.
- ⁵¹St. Helena is the British administrative center for Ascension, Gough, Tristan de Cunha, Inaccessible and Nightingale Islands.
- ⁵²The Cook Islands are a self-governing dependency of New Zealand, but are also claimed by the U.S.
- ⁵³The population of the Northern Cook Islands cannot be determined from our references.
- ⁵⁴Was claimed by the U.S. at one time. The present status of the U.S. claim is not known.
- ⁵⁵Southwest Africa, or Namibia, is a self-governing dependency of South Africa.
- ⁵⁶This is an unofficial prefix, as the ITU does not recognize prefixes beginning with the figure 1.
- ⁵⁷See the February, 1972 issue of CQ, pages 64-66.
- ⁵⁸On National Geographic Society maps Agaiaga and St. Brandon appear to be about 400 miles apart.
- ⁵⁹In the British Commonwealth.

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The Two-Meter Groundplane as a Gain Antenna

A groundplane is a unity-gain, omnidirectional antenna.

So much for Lesson 1. The meat of this article, Lesson 2, will shoot down what you learned in Lesson 1. Because virtually any vertically polarized omnidirectional antenna can be used to provide gain and directivity *selectively*—without modification of the antenna itself.

To many, a true omnidirectional antenna represents the optimum approach. For the amateur who operates in the center of a metropolitan area, or the hilltop ham, or the centrally located net control—what could be better? But—what about the guy who lives between two cities and wants good, broad coverage in only two directions? Or the fellow at the foot of the hill who wastes all that rf by dumping half his output into it?

An omnidirectional antenna can still be the answer, but employed to provide gain where the action is.

The secret is not in the antenna itself, but rather in the mounting of the antenna. *Don't mount it atop a mast.* Place it near the top of a mast or tower, and adjacent to it so that the tower or mast itself becomes a part of your antenna system. Learn two simple rules and you can design your omnidirectional antenna to give gain in practically any direction or directions you choose: The first rule is that for each quarter wavelength you space the vertical radiator of the antenna from the tower or mast, you get one major lobe. And the second rule: The bigger the mass of the supporting structure, the wider the frontal and side lobes. Consider the radiation pattern of Fig. 1. The solid round dot at the center represents an antenna supporting structure. If an omnidirectional antenna were mounted at the top of the structure, the pattern would be roughly

circular. The broken line represents this pattern at a relative field strength of 1.0. If the same antenna were to be moved from the top to the front of the tower and spaced a quarter wavelength from it, the pattern becomes more or less like that of the heavy asymmetrical line. (This is assuming the tower is between eight inches and a foot in diameter adjacent to where the antenna is mounted.) In the sketch, the antenna is represented by the small circle above the center dot.

As shown, the result is an excellent 180-degree signal with no wasted rf off the back. And the bonus is a 30-percent increase in signal strength over 150 degrees of that half-circle. Naturally, this city-side amateur isn't getting something for nothing; whatever he gains in one place, he loses in another. This can be demonstrated by thinking of the broken line in the sketch as a closed loop of string. You can manipulate the string and change the configuration of

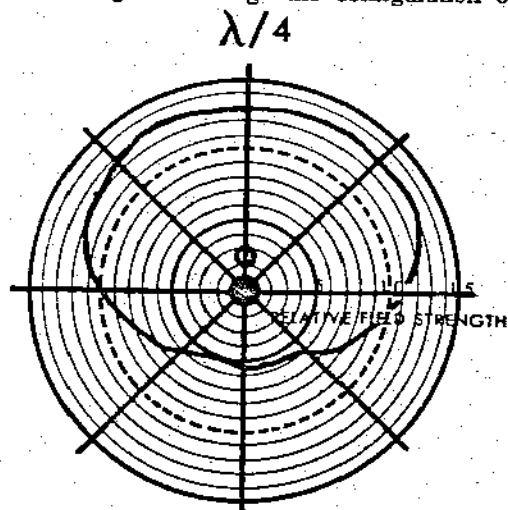


Fig. 1.

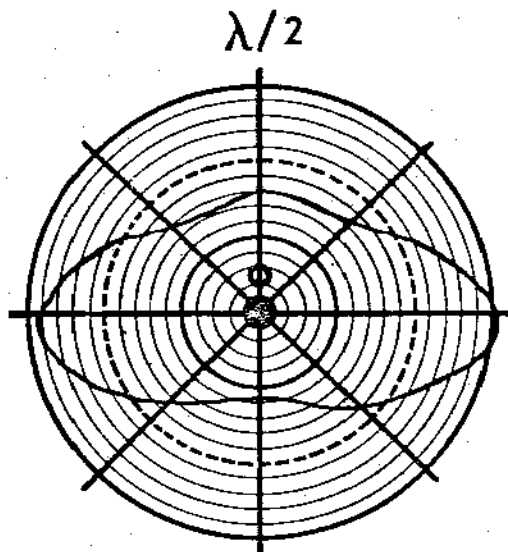


Fig. 2.

it, but for all practical purposes, the size remains the same.

For the amateur who wants good coverage in two general areas spaced roughly 180 degrees apart, the best approach would be to mount the antenna a full half-wavelength from the support structure. A typical radiation pattern from this mounting method is shown in Fig. 2. It should be borne in mind that the mass of the tower affects the pattern substantially. A mast would yield a pattern with sharper, thinner lobes—more gain at the expense of horizontal angle of

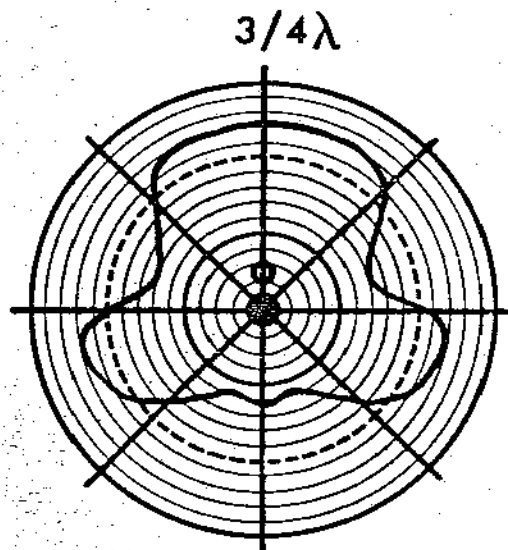


Fig. 3.

radiation. The half-wave pattern shows that the signal is reduced by 20 percent (from a top-mounted vertical) in a 90-degree area off the front of the antenna, and by about 35 percent in a 60-degree area off the back. But it is increased by as much as 150 percent laterally.

A sort of cloverleaf effect can be obtained by spacing the antenna three quarter-wavelengths from the tower. As shown in Fig. 3, it results in a very broad frontal lobe with uniform gain over about 80 degrees. The two nulls slightly forward of both sides is compensated for by the gain just rearward of both sides.

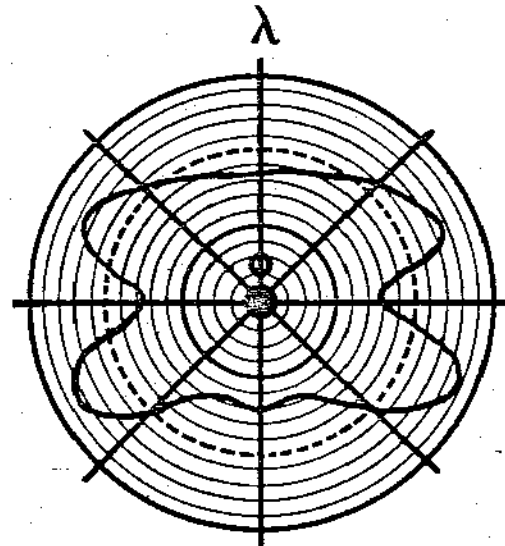


Fig. 4.

It is probably impractical to consider mounting the antenna more than three quarter-waves from the tower. On two meters, a full wavelength would be in the neighborhood of six feet. But the sketch of Fig. 4 gives a pretty good idea of what the pattern would look like.

The important thing is that the theory is not restricted to any frequency. The patterns remain the same regardless of whether the operation is on six meters or 420 MHz. And the radiation patterns gradually shift from one to the other, so by experimenting with varying spacings, practically any desired effect can be achieved.

... K6MVH

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The 1981-82 season is about to come to an end, the new executive will be looking forward to next year.

The last two years that I have been involved with field day, it was very hard to get anyone to help or to operate the station's, this is very discouraging for those who are setting it up, everyone comes just to look around, participation is the word so let's get with it. If you can't get out to help set up fine, but at least find an hour to work one of the rig's. Make the work of setting up worth while.

Hope to see all of the members show up. Norm it would be a good idea to have a book for everyone to sign when they come, how long they worked, and so on. Then there efforts would be reflected.

73's
VE3LPD