

Results of the 1960 CQ World-Wide DX C.W. Contest

By Frank Anzalone, W1WY
Chairman, CQ Contest Committee

THANKS to the response from overseas stations we are happy to report a record breaking number of logs, 1000 and 1 to be exact, from 107 different countries. This an increase of over 160 entries as compared to last year, and 9 additional countries. This in spite of the fact that returns from this country were considerably lower in the mid-west. However this was more than made up by the usual activity in Europe plus a tremendous effort by the boys over in Japan and the radio clubs of the USSR. For the latter it paid off, two of the Trophies going to the land of the Sputnik.

It should be no surprise to see Vladimir Semenov, UA9DN at the top of the pack. He is no newcomer to our contest and his all out effort almost equalled last year's all time high score made by Maj. Glenn Luse, CN8JX. Congratulations Vlad, the Larry LeKashman, W9IOP Trophy is yours.

Once again Josef Plzak, 7G1A last year's Trophy winner was in the runner-up position. Josef also broke a million, mainly because of his record 1,497 contacts.

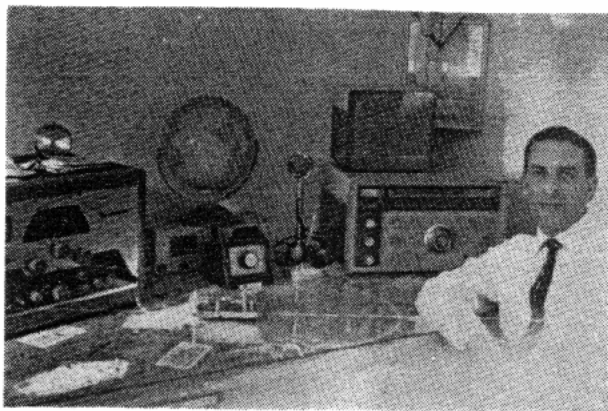
At first glance we thought the two year lay-off had given Katashi Nose, KH6IJ the necessary energy to push him to the top but a few corrections in his arithmetic showed it was only an illusion. "Nosey" had to settle for third.

Not far behind in the 4th spot is A. E. Dowdeswell, ST2AR, a call that merits watching in future contests.

A couple of more Africans, VQ4DT and ZD2JKO are in the fifth and sixth spot respectively. Both Henning Overgaard and Michael Dransfield placed in the Top Ten in the Phone contest, with 4DT winning the Trophy.

This year's 4X4 representative is Hanan H. Hirsch, 4X4MB, who placed seventh.

And over in the Ukraine, UB5FJ and UB5WF were at it again, with Anatoly once more showing his heels to Vladimir.



T. D'Angelo Drummond, PY4OD—Second world high on 14 mc.

The only US entry to make the magic group is James H. Ahlgren, W4YHD, who usually goes in for single band competition.

Say, how about that boy Ricardo Sierra Jr., CX2CO. He went and did it again! Another Trophy, this one donated by John Ryan, W7KVU, for making the highest score on a single band. This one also on 14 mc, matching the one he won in the Phone contest. Ricky's 370,139 points and 1,032 contacts is a new record for a single band. Man, that's really knocking 'em off.

Mention must also be made of Talma D'Angelo Drummond, PY4OD with the second highest score, also on 14 mc.

As a matter of fact, practically all the high single-band scores were made on 20, and all continents were well represented.

In this country, Vic Clark, W4KFC, (who else) was the leader and only single band station to work over 100 countries. While Alan Emerald K6EIV was the only one to work all 40 Zones.

Next in popularity was 21 mc but the activity was somewhat reduced on this band. European openings only lasted a few hours and after that you really had to dig for a few contacts.

Gunter Heinzen, DL6EN is the top man and Al Stobbe, W2WZ is still the big gun on this side of the pond. Yours truly took a crack at this band but found the competition a bit tough. Hi!

Some of the fellows were out to prove that 10 was still alive and they proved their point. A look at the scores will show the top group all within shouting distance of each other but the scores of course are much lower than previous years. Pickings are growing slimmer and you really have to move fast as the band openings don't last long.

If you had a beam or a full gallon it was possible to run up a good score on 40. Bob Martinez, K2DGT had both and again is top man on the Totem pole. Bob was working Europeans while the sun was still high on the horizon. And he worked JA1FL and JA1YL the long way around at 4:30 in the afternoon, most unusual on 7 mc from the East coast.

Missing however was W3BVN's consistent 40 meter signal, but Jake Schott, W8FGX, is still putting out a potent signal in the mid-west and Hayward Perry, W4DHZ, also did a fine job which his 2 element mini-beam.

The Europeans made good use of 40 locally and ran up good totals on that band. As did the West coast boys with their pipe line to Japan.

Once again 80 was strictly a European band with Wes Wysocki, SP2DX an old hand at contests, leading the pack by a narrow margin. Over here, VE1ZZ, VE3AGX and W9PNE were the only ones to show any kind of a score.

As for 160 we have come to the conclusion that

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The crew
Front Row:
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the Top Band does not open up this early in the season. However some of the multiplier seekers used it for what it was worth.

Over in the Multi-Operator, Single Transmitter division, which is increasing with popularity, especially among the club stations in some of the European countries, the entries were double those of last year. One of the more active areas was the Ukraine and a couple of operators of the Stalino Radio Club, Alfred Barkov and Leo Yailenko put UB5KAB up at the top to win the Tony Susen, W3AOH Trophy for their club. That makes two for the boys of the USSR.

Improving their score and position over last year was LZ1KBA, headed by Dimiter Petrov and two other operators of the Sofia Radio Club, Stefan and Spas. The whole station was loaded on a truck and moved to a quiet mountain location and in spite of adverse weather and inferior antennas, the boys took the second spot. Wait 'til next year.

A surprise 3rd was a West Coast entry, W6GHM/6, who did so well as a single in the Phone contest. Evidently Stew Fason moved the rig to another location and got Pete Wolf, W6FUF to give him a hand.



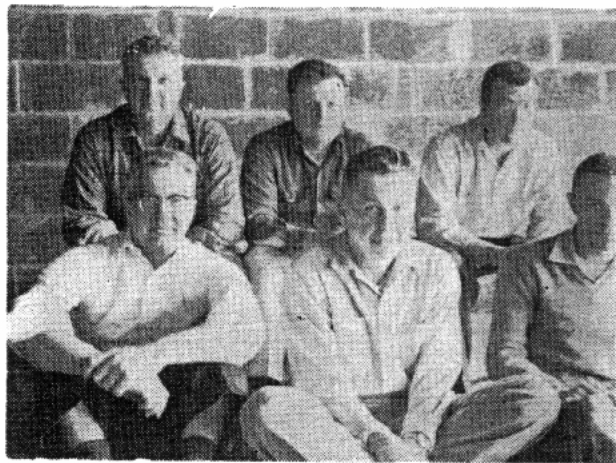
Warren Mallory, W7PGS — Runner-up for all band honors. That's a full gallon he's keying.

Another club group, 4 operators from the Baku Radio Club took the 4th spot with UD6KAB, while Tubby and Jeff Vale at VQ5NQ, proved that it can be done from "Down Under."

The boys over at Hot Ziggety ONE American Boy, found conditions rough and finished out of the money.

The "Big Guns", Multi-Operator, Multi-Transmitter stations, were practically the same group as in last year's brawl. However the order of finish is changed around a bit and this year Tony Susen and his gang at W3AOH lead the pack by a narrow margin to win the Buzz Reeves, K2GL Trophy. It was only by virtue of a bigger multiplier that they were able to nose out a new group from The Potomac Valley Radio Club. The gang at W3MSK really gave W3AOH a run for their Trophy.

The crew at UB5KBB, Power House of the Ukraine. Front Row: UT5CC, UB5LN, UB5LK, UB5KCD. Back row: UB5CI, Chief Op.; UB5DP, UB5LV and UB5LM.



The gang at W3MSK — Front row: W3MSK himself, W3JTC, W6HOH/3. Back row: W3MCG, W3PZW, W3FYS.

Again in 3rd place was UB5KBB of the Kharkov Radio Club. The boys would have had a much higher score but they got a bit careless and duplicated too many contacts.

Hardi Ludwig and his crew at DJ3JZ, last year's Trophy winner, found the loss on the higher bands too great and had to settle for the 4th spot. Better luck next year Hardi.

It seems the whole membership of the East Bohemian Radio Club was pounding brass at OK1KKS. They did manage to beat out W6KW for the 5th spot. Roger Mace and the boys could not overcome their locational west coast handicap.

The Potomac Valley Radio Club finally made it and won the CQ Plaque. However it was only made possible by the addition of a new "Big Gun" W3MSK, that was the clincher. This should make Lenny Chertok, Vic Clark and the rest very happy.

They were closely pressed by the German DX Team, last year's winner. We breathed a sigh of relief when the scores were tabulated and the GDXT fell short a few thousand points. Their secretary would have been on the spot had their score been higher. Since he did not send up a list of their participating members and their scores, we would have had no other alternative but to disqualify their score. We insist that clubs who are in contention for the Plaque observe this rule.

The North Jersey bunch made their usual fine team effort but lacked the big clincher.

We know that Southern California can do much better but they just can't seem to get rolling the past few years.



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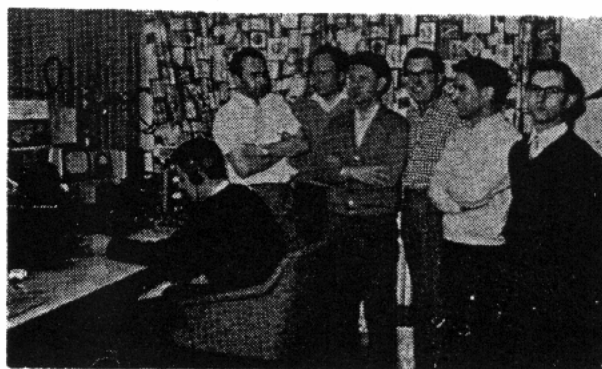
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U. S. A. Club Scores

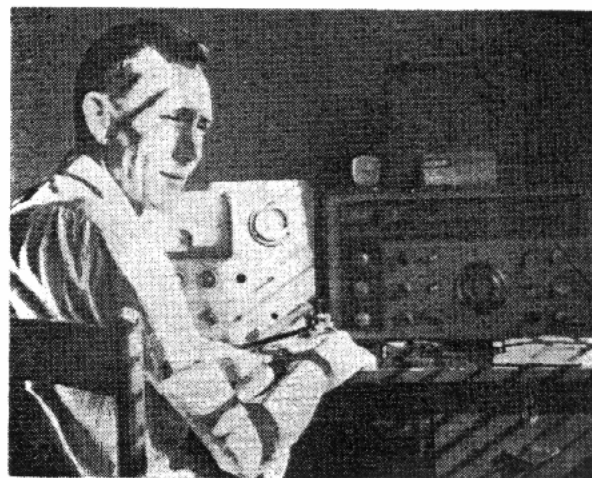
Potomac Valley Radio Club	2,861,618
North Jersey DX Assn.	2,147,037
Southern California DX Club	2,061,954
Northeastern DX Club	1,061,429
Hamfesters Radio Club (Ill.)	445,831
Ohio Valley Amateur Radio Assn.	368,068
El Ray Club (Mass.)	196,524
Maui Amateur Radio Club (Hawaii)	127,413
West Gulf DX Club	102,204
Frankford Radio Club (Penna.)	66,304
Niles Michigan Amateur Radio Club	58,163
Detroit Amateur Radio Assn. (Mich.)	55,257
QCWA-New York Chapter	52,365
Northern California DX Club	47,115
Palo Alto Radio Club	26,001
Four Lakes Radio Club	13,851
Houston Texas Radio Club	9,882
Order of Boiled Owls (New York)	8,313
Connecticut Wireless Assn.	5,307
Southeastern DX Club	3,846
Florida DX Club	2,992
Bronx High School Radio Club	651
Columbus Amateur Radio Club (Ohio)	518

Foreign Club Scores

German DX Team (DARC)	2,823,019
Uruguay DX Club (RCU)	1,074,316
Radio Club of Kharkov (Ukraine)	1,026,457
Sofia City Radio Club (Bulgaria)	879,450
East Bohemia Radio Club (CAV)	766,824
Radio Club of Bucharest (Roumania)	198,504
Far East DX Ploitiers (Japan)	197,559
Turun Radioamatoorit (Finland)	181,792
Japan DX Radio Club (JARL)	175,577
Central Radio Club Praha (CAV)	157,606
Lucerne DX Division (USKA)	148,891
Radio Club Timsoara (Roumania)	148,632
Radio Club of Tartu (Estonia)	135,301
Kuibyshev Radio Club (USSR)	105,408
Radio Club Stalino (Ukraine)	102,879
Radio Club of Tallinn (Estonia)	101,183
Bremerhaven Radio Club (Germany)	75,774
Radio Club Gyor (Hungary)	69,708
Gdansk Radio Club (PZK)	47,991
Krakowski Radio Club (PZK)	46,580
Radio Club of Maribor (SRJ)	43,164
Radio Club of Kaluga (USSR)	35,682
Radio Club Varna (Bulgaria)	33,488
Liga Colombiana de Radio Aficionados	32,172
Shizuoka Amateur Radio Club (SARC)	24,408
Stockholm Amateur Radio Club (SRA)	23,920
Polskizwiazek-Rzeszow (PZK)	21,481
Lodzki Radio Klub (PZK)	17,019
Radio Club Sverdlovsk (USSR)	17,010
Sapporo Amateur Radio Club (Japan)	14,135
Toko Radio Club (Japan)	11,843
Opolski Radio Club (PZK)	11,781
Stalin Radio Club (Roumania)	10,730
Radio Club of Rousse (Bulgaria)	10,528
Sliven Radio Club (Bulgaria)	8,692
Isahaya Radio Club (Japan)	7,614
Radio Club of Viljandi (Estonia)	6,965
Radio Club of Papuk-Osijek (SRJ)	6,255
Radio Club of Galati (Roumania)	6,000
Linhopings Radio Amoter (Sweden)	5,324
Radio Club Braila (Roumania)	4,680
Kagoshima Club (Japan)	4,360
Radio Club of Warsaw (PZK)	4,255
Nagano Amateur Radio Club (Japan)	2,784
Pozna Radio Club (PZK)	1,742
Siemens Radio Club (Germany)	1,680



DJ3JZ l. to r. DL9CI at key, DJ1BZ, DL1CR, DL3AO, DJ3JZ himself, DJ1BP and DJ4LI.



Des Vahl, ZS7M—A rare one that confined his operation to 14 mc.

The Northeastern DX Association made a good showing for their first real effort. They certainly have the membership to be a top contender.

A surprise was the score turned in by the Uruguay DX Club, a new organization with limited membership.

By plan and coincidence, four DXpeditions showed up at choice spots. FL9 from French Somaliland, HKØHCA from San Andres, LX3AH from Luxembourg and ZS6IF/9 from Bechaunaland.

You will note we omitted the power column in the listing of the results. This had to be done to overcome a printing problem that has been plaguing us. Since it has no bearing on the final score that item was the most expendable.

The usual generous distribution of certificates will soon be in the mail. Sometimes I think we are a little too generous, especially in large areas like Canada, Australia and, for that matter certain areas in this country. The returns as compared to the known activity is disappointing to say the least. What's the answer?

Well, that's about it for this one. Was that a sigh of relief? Emphatically yes, chorus Andy Malashuk W1GYE, Mac McIntire W2BO and Ben Lazarus W2JB. Andy is going back to rebuilding his final, Mac is planning a western trip and Ben can go back to dreaming about that vacation up in the Adirondacks. Me? I'm starting to plan for the next one, after a short vacation to Nassau, that is.

73 for now, Frank, WIWY

ALL B

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ST2AR
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LZ1KBA
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SI
North A

United	
W1BIH A	197,220
K1JTC A	196,520
W1FZ "	127,830
K1MEM "	16,310
W1KKB "	10,770
K1PNN "	8,220
W1QMM "	6,900
W1FXT "	5,300
K1KPS/1	3,400
W1OJR 28	22,000
W1BPW "	1,700
W1WY 21	50,600
K1DAT "	15,100
W1GYE 14	46,800
K1NHR "	5,300
K2DCA A	284,100
W2EQS A	272,000
W2BXA A	270,200
W2AGW "	209,700
W2JT "	145,500
W2OBX "	116,200
W2JVU "	114,900
K2UVU "	96,400
WA20JD "	93,200
W2LV "	92,500
W2TQC "	91,900
K2BZT "	80,500
K2GHM "	80,500
W2DEV "	76,600
K2BSM "	48,800
W2DGV "	43,500
W2LAX "	33,100
K2DSW "	11,000
W2TP "	9,300
W2FBS "	8,500
W2BOK "	5,500



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Top Ten

ALL BAND—SINGLE OPERATOR

UA9DN	1,114,695	ZD2JKO	564,134
7G1A	1,041,755	4X4MB	539,090
KH6IJ	894,615	UB5FJ	517,920
ST2AR	810,650	W4YHD	513,720
VQ4DT	666,600	UB5WF	463,556

Top Five

MULTI-OPERATOR SINGLE TRANSMITTER

UB5KAB	637,980	UD6KAB	350,217
LZ1KBA	520,416	VK5NQ	296,185
W6GHM/6	400,425		

Top Five

MULTI-OPERATOR MULTI-TRANSMITTER

W3AOH	1,049,104	DJ3JZ	864,930
W3MSK	1,024,373	OK1KKS	766,824
UB5KBB	960,960		

Continental Leaders

SINGLE BAND

28 Mc		14 Mc	
4X4LC	41,635	CX2CO	370,139
W3LSG	39,440	4X4FA	184,460
G4CP	35,760	ZS2HI	157,311
CX9AJ	31,488	W4KFC	147,852
		KH6DLF	143,070
		OK1LM	73,357
21 Mc		7 Mc	
DL6EN	80,353	K2DGT	92,700
PY4GA	62,136	4X4DH	63,318
W2WZ	60,610	DM2ABL	29,491
ZS6APQ	53,380	FA8RJ	5,928
KH6DVG	40,138	VK4XW	3,660
UA9DT	39,655		
3.5 Mc		1.8 Mc	
SP2DX	14,940	OK1WT	473
VE1ZZ	3,128		

U.S.A. Runners-up

All Band	W3GRF	446,208
28 Mc	W8WZ	36,000
21 Mc	W3MFJ	58,330
14 Mc	K6EIV	99,912
7 Mc	W8FGX	66,240
3.5 Mc	W9PNE	1,034

Number groups after call letters denote the following: Band, final score, number of QSOs zones, and countries. Certificate winners are indicated in bold face.

SINGLE OPERATOR North America

United States			
W1BH A	197,224	272	96 181
K1JTC A	196,524	342	71 135
W1FZ	127,853	230	73 124
K1MEM	16,310	92	28 42
W1IKB	10,773	67	25 38
K1PNN	8,280	53	27 42
W1QNM	6,900	44	26 34
W1FXT	5,307	38	25 36
K1KPS/1	3,402	39	18 24
W10JR 28	22,010	128	20 42
W1BPW	1,794	27	12 14
W1WY 21	50,654	212	26 60
K1DAT	15,100	91	22 40
W1GYE 14	46,852	159	33 73
K1NHR	5,356	42	20 32
K2DCA A	284,125	387	96 179
W2EQS A	272,076	366	99 188
W2BXA A	270,216	409	84 159
W2AGW	209,703	301	88 159
W2JT	145,536	276	67 125
W20RX	116,237	110	49 75
W2JUV	114,950	249	61 114
K2JUV	96,455	195	79 112
W20JD	93,264	204	69 105
W2LV	92,520	218	67 113
W2TQC	91,964	192	66 117
K2BZT	80,550	169	70 109
K2GHM	80,524	171	67 97
W2DEW	76,670	176	67 103
K2BSM	48,822	139	31 63
W2DCW	43,569	125	57 84
W2LAX	33,189	119	46 65
K2DSW	11,072	62	23 41
W2TP	9,322	53	22 37
W2FRS	8,580	48	26 40
W2BOK	5,512	40	22 31
W2GKE	4,150	40	22 28
W2GT	3,552	30	23 25
WA2DES	3,120	33	16 24
W2HML	2,720	26	19 21
W2QKJ	2,623	23	20 23
WA2IEK	2,301	26	18 21
K2YOR	1,958	31	8 14
W2JB	1,711	23	11 18
K2OFD	651	17	10 11
WA2JAM	180	10	8 7
K2HWL	25,406	118	25 53
W2PTI	15,730	90	23 42
K2UVV	1,638	29	9 12
W2WZ 21	60,610	233	29 66
W2CYS	58,032	200	30 74
W2HAQ	27,636	115	26 58
W2YTH	24,949	138	16 45
W2GZZ	16,835	92	26 39
W2LPE 14	74,370	240	34 77
W2GUM	67,378	210	36 82
K2JGG	30,780	120	32 63
W2PCJ	30,300	115	29 71
W2SUC	22,386	95	27 55
W2AZS	8,313	55	19 32
W2UGM	8,190	52	25 40
K2UYG	6,954	51	22 35
W2PKM	2,516	24	16 21
K2QHL	1,000	29	16 24
K2DGT 7	92,700	337	31 72
W3GRF A	446,208	497	114 222
W3MSR A	141,484	254	87 130
W3KTW	44,888	133	48 76
W2AZS	28,574	109	39 52
W3IPO	21,658	88	34 57
W3ADZ	18,080	91	33 47

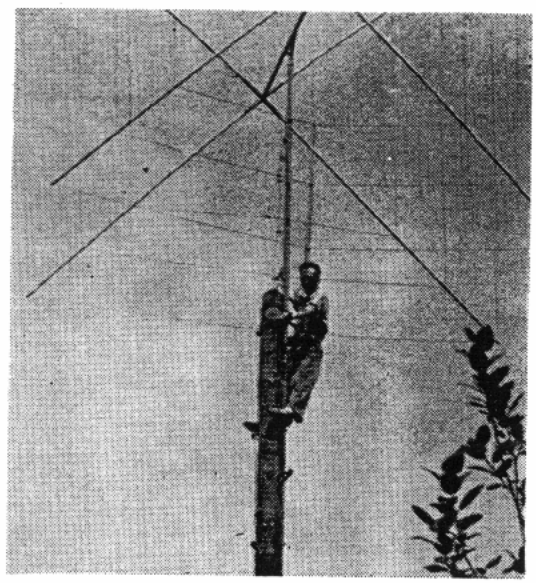
W3MCG	4,407	40	16	23	W5WZQ	89,075	195	73	102	
W3KYF	3,498	38	24	29	W5BUK	59,679	142	73	98	
K3KMO	3,136	33	21	28	W5LJT	6,104	47	23	33	
K3AIG	2,324	31	12	16	W5LGG 28	30,294	137	27	54	
W3LSG 28	39,440	178	25	55	K5UYF 21	252	9	5	7	
W3AYS	14,628	114	22	47	W5KC 14	33,250	131	32	63	
W3QQL	8,946	53	21	42	K5DGI	30,452	121	33	59	
W3QZ	7,497	57	20	31	W5PM	9,882	62	24	30	
W3HWE	432	15	8	8	W5BOS	8,322	64	22	35	
W3MFJ	58,330	219	28	67	W5EJT	4,025	41	14	21	
W3OCU	48,224	197	27	61	W6IBD A	281,060	413	108	152	
W3TFLN	34,943	156	27	56	K6CTV A	184,338	361	78	120	
W3KFFQ	79,230	248	33	81	K6RTK	64,196	77	42	42	
W3JTC	74,752	208	37	91	K6BWX	43,329	162	46	55	
W3ZBG	47,840	153	35	80	W6UQC	34,454	118	46	61	
W3RYX	37,525	153	31	64	K6IEC	34,006	121	45	53	
W3EIS	578	24	8	9	W6EKZ	29,190	96	46	59	
W4YHD A	513,720	524	124	236	W6WX	26,001	91	48	59	
W4KXV	139,612	262	83	126	W6VC	20,097	98	42	45	
W4AZK	78,010	199	49	96	W6QDE	3,555	32	20	25	
W4RIM	1,508	19	12	17	K6QBH	2,015	23	13	18	
W4RVW	14,457	83	21	40	W6AM	216	6	6	6	
W4PLL	14,213	91	21	40	W6BSY 21	11,682	79	25	34	
K4YUD	3,081	32	17	22	W6RIL	1,728	22	15	17	
W4EE0	1,800	20	13	17	K6EIV 14	99,912	273	40	98	
K4ZWR	1,708	24	12	16	K6VTC	85,426	260	37	84	
W4KPB	630	12	9	12	K6JFX	7,605	66	20	25	
W4JAT 21	49,098	191	27	71	K6JJC	4,875	43	16	23	
K4SXR	10,710	91	21	42	W6ID	4,410	35	24	28	
K4BQU	9,130	67	21	34	W6VRJ	2,296	41	13	15	
W4IEH	2,992	30	7	17	W6PQW 7	20,923	153	22	27	
W4QAR	325	5	5	5	W6NZV	308	15	7	7	
W4KFC	147,852	362	37	109	W7VY A	212,553	360	82	127	
W4LVV	46,690	151	35	80	W7PGS	145,110	269	86	124	
W4BQY	35,616	126	36	70	W7BTH	5,940	39	25	30	
W4QM	16,037	81	27	52	W7ENA	4,485	42	18	21	
W4QVJ	2,074	23	15	19	W7ZVY	644	21	12	11	
W4H0S/4	84	4	3	4	W7OSR	212	16	10	7	
W4DHZ 7	41,850	181	28	62	K7BJN 28	6,396	65	16	23	
W40SD	6,732	49	19	32	W7AHX	21	6,815	57	19	28
W5BRR A	106,863	216	81	118	K7AOZ	3,885	52	16	21	
W5ZD	94,073	238	60	91	W7POU	1,210	26	11	11	
					W7YGN	14	68,572	194	39	85
					W7CAB	6,600	54	17	27	

35,934	248	20	33
275	15	5	6
3,266	57	7	16
39,655	187	22	55
9,600	76	14	34
172,674	582	33	73
17,010	124	15	39
15,290	112	20	35
7,714	92	17	21
5,050	77	15	10
4,158	90	10	12
Georgia			
304,764	524	65	153
Kazakh			
17,340	143	18	33
5,312	68	9	23
Tadzhik			
126,920	496	25	70

Europe			
and Island			
5,192	92	14	30
2,607	75	11	22
Austria			
43,908	372	91	190
36,414	144	41	61
5,226	115	8	31
3,528	85	9	27
Belgium			
4,230	63	18	29
12,921	151	18	41
Bulgaria			
33,488	284	24	68
13,632	174	16	48
17,700	153	19	41
3,876	91	7	27
23,260	305	14	44
16,250	231	14	36
8,299	158	8	35
3,712	104	8	24
Crete			
18,954	192	20	61
Czechoslovakia			
41,900	376	59	156
01,516	515	36	128
92,040	352	48	129
11,293	215	41	78
10,158	243	30	108
9,754	174	41	98
5,733	201	36	93
2,574	175	36	86
1,605	198	28	77
2,210	132	33	77
17,175	154	24	51
15,903	134	26	67



Why winner and concentrating on a



Gunter Heinzen, DL6EN—Making final adjustments to his tri-band quad which made him world high man on 21 mc.

0K3KFE	10,855	133	19	46
0K2YU	9,730	124	16	54
0K1KNL	2,016	50	9	27
0K1KIV	1,760	56	12	20
0K3DG 28	5,904	53	17	24
0K1BMW	21	31,200	168	24
0K1VB	18,972	113	25	43
0K3KGI	13,995	155	18	27
0K1KUR	3,795	56	13	20
0K1LK	3,720	45	16	24
0K1AAA	608	16	8	8
0K1LM	14	73,357	349	30
0K3KMS	41,988	344	21	62
0K3UI	28,428	289	16	53
0K2KGZ	22,464	208	19	53
0K1TW	19,247	165	17	54
0K1KKJ	15,984	226	14	40
0K3IR	11,832	153	12	46
0K1NK	4,788	96	12	30
0K1AVT	3,745	84	7	28
0K1PC	817	41	5	19
0K1WY	798	40	4	15
0K1NW 7	6,594	136	9	33
0K2KMR	3,060	68	7	29
0K100	589	14	6	14
0K2KBR	3.5	13,860	307	8
0K1IK	3.5	10,062	246	6
0K3JR	6,633	197	5	28
0K3KJH	6,156	206	7	29
0K2KGV	5,957	164	6	31
0K1AWJ	5,363	158	6	31
0K1PG	3,648	124	5	26
0K3KKF	3,270	106	5	25
0K2BBJ	3,204	142	5	23
0K2K0J	2,828	107	5	23
0K3KES	2,387	80	5	26
0K3CCC	2,225	89	4	21
0K3CCA	1,098	86	4	14
0K1WT	1.8	473	49	3
0K3EE	352	33	3	8
0K1ADS	104	18	3	5
Denmark				
0Z2NU A	57,784	303	34	98
0Z4RT	22,544	186	24	74
0Z9N	1,742	31	14	12
0Z3CF 21	9,001	143	11	40
0Z8KR	42	3	3	3
0Z3GW 7	840	23	7	17
England				
G3FPQ A	410,176	606	84	188
G3FXB	328,656	546	72	174
G2DC	168,432	332	70	172
G3NFT	47,344	250	25	63
G3MPR	31,395	190	30	75
G3FTQ	29,400	177	29	76
G3JKY	28,767	124	34	95
G3KHT	19,190	130	31	64
G3MWZ	5,253	76	17	34
G4CP 28	35,760	231	19	41
G5RP	17,238	131	17	34
G3KKP	15,168	128	17	31
G3EUE	2,625	42	9	16
G3EYV 21	37,453	238	20	47
G2AJB 14	10,608	131	13	38
G8DI	6,683	133	10	31
G3WP	2,257	43	10	27
G3LET 7	23,433	183	19	54
G3ISX	2,635	72	6	25
Finland				
0H1TN A	95,418	343	55	131
0H5QN A	62,626	227	51	122
0H2ZL	38,367	179	39	108
0H2FS	27,025	181	28	87
0H9PF	25,704	130	35	84
0H6AA	24,717	224	33	77
0H1VA	21,669	220	26	67
0H7NW	19,404	129	31	68
0H3NM	10,336	107	19	57
0H2BZ	9,576	71	25	51
0H5SG	8,280	95	20	52
0H3AD	6,188	83	19	49
0H2FT	2,622	40	19	38
0H9QB	1,914	37	11	22
0H3NY	1,728	28	11	21
0H3TD	1,020	31	11	19
0H2CP	850	53	4	13
0H3VG	380	20	7	12
0H2RD	340	15	8	12
0H6UD	235	17	6	9
0H3VX	48	10	3	6
0H3SG 28	2,802	34	12	24
0H2QV 21	7,800	88	18	34
0H3WL	924	42	5	16
0H3RA	760	9	5	8
0H2MQ 14	33,176	294	24	64
0H2PM	22,557	235	18	55
0H5NJ	21,600	152	23	52
0H3TE	20,898	141	24	57
0H2QO	10,659	144	16	40
0H3PX	3,395	85	7	28
0H9PA	646	26	8	11
0H5PG	140	11	4	6

0H7NF 7	7,728	142	11	35
0H2DW	2,465	79	7	20
0H6RC	1,200	31	7	23
0H2CD	90	13	3	6
France				
F9MS A	221,850	664	49	125
F3ML	63,983	340	34	75
F9BB	18,576	143	21	34
F2PO	16,600	132	27	56
F8IN	2,150	50	6	19
F2AS	376	20	6	11
F8VO 28	600	20	6	6
F8SQ 21	10,131	132	11	22
Germany				
DJ3KR A	299,904	532	82	182
DL7AA A	171,430	336	71	146
DJ2IB A	167,535	370	68	151
DL7DF	134,750	258	72	173
DL7BQ	96,000	294	51	109
DJ4DN	83,720	253	61	121
DL6WD	81,549	305	39	78
DL7EN	72,924	206	61	116
DJ4EJ	53,375	248	36	89
DJ480	49,140	262	37	98
DJ2SK	33,792	159	39	89
DJ5BV	31,097	211	31	90
DL00S	25,953	169	31	92
DL7BK	25,403	98	45	88
DL1GN	24,961	196	27	82
DL9KP	21,280	117	29	47
DM2BEL	21,112	196	23	68
DL7CF	18,810	134	27	63
DM2ABE	16,458	206	20	58
DL1XS	15,456	92	32	54
DJ2IV	14,823	102	31	50
DL90L	14,329	82	32	57
DLSCM	12,775	89	29	44
DJ3YU	11,508	102	30	54
DL8DL	8,360	109	21	55
DM2ACM	6,468	60	23	43
DJ1UE	5,525	68	17	48
DL1YB	4,779	52	21	38
DJ2SL	4,575	57	23	38
DL1YA	4,224	42	20	24
DL9RP	3,286	33	17	19
DL1EA	1,680	29	10	11
DL3BP	1,274	42	10	16
DM2BDN	390	30	4	11
DM3XFC	221	19	4	9
DJ5QK	96	10	4	8
DL6MK	28	19,437	121	20
DJ40P	13,884	105	21	31
DL6DF	6,623	69	16	21
DL6EN 21	80,353	327	31	60
DL7BA	74,865	290	29	64
DL3TW	16,324	116	18	35
DL3WT	7,749	87	13	28
DJ5VQ	6,711	70	16	31
DJ5FZ	4,917	55	14	19
DJ5IH	2,825	48	9	16
DL7IP	800	24	8	8
DM2AHM	705	17	9	6
DJ2MN 14	48,348	263	31	71
DJ3WU	2,720	86	6	26
DL90W	700	34	5	15
DM2ABL	7	29,491	277	19
DL1JW	27,667	276	17	56
DJ5KN	3,332	91	7	27
DJ2XP	1,953	68	4	27
DJ2RE	1,710	27	10	20
DL7JF	850	48	4	13
DJ3WE	3.5	13,770	267	8
DJ2DT	760	42	4	15
DL1ES	740	32	7	21
DM3YCM	578	37	4	13
DL4BU 7	25,254	330	15	46
Gibraltar				
ZB2AD A	71,298	314	32	70
Greece				
SV0WI A	343,938	785	77	189
SV0VQ	63,873	355	35	106
Hungary				
HA1KSA A	69,708	253	48	109
HA7PZ A	42,300	340	26	74
HASKCU	19,920	168	31	49
HASCF	15,100	255	24	51
HA5AW	12,090	152	15	62
HA5BI	9,398	79	26	48
HA1SB	4,047	71	17	40
HA90S	3,772	74	17	24
HA5FO	3,139	85	18	25
HA5FY	3,080	67	13	27
HA6NC	1,596	56	11	17
HA6KNR	1,568	54	9	19
HA4KYB	703	41	5	14
HA4YB	104	13	3	5
HA8WS 7	6,771	165	7	30
Iceland				
TF3AB A	20,033	146	20	47
Italy				
ITTEB A	20,610	133	30	60
Jan Mayen Island				
LA1NG/P A	7,958	113	15	31
Netherlands				
PA0TAU A	230,307	450	68	163
PA0LOU	162,214	424	60	161
PA0YN	16,147	115	25	42
PA0PFW	6,576	90	17	31
PA0PAN	713	29	7	16
PA0ATY	14	21,483	203	19
PA0SNG	7,896	134	11	36
PA0VV	2,220	60	7	23
PA0JAL	1,568	40	7	21
PA0WAC	629	19	8	9
PA0NIC 7	10,824	194	10	34
PA0VB	3.5	12,212	251	8
PA0LV	11,382	249	6	36
PA0TA	940	49	4	16
Northern Ireland				
GI3AXI	28	14,040	139	12
Norway				
LA5HE A	66,341	273	46	117
LA6U	18,414	127	26	67
LA20G	7,904	95	19	57
LA2Q	7,645	96	14	41
Poland				
SP8FZ A	128,336	314	62	146
SP6YC	108,853	267	58	141
SP9KAD	16,654	113	34	55
SP6AAT	12,948	127	20	58
SP3HD	10,788	191	18	44
SP				

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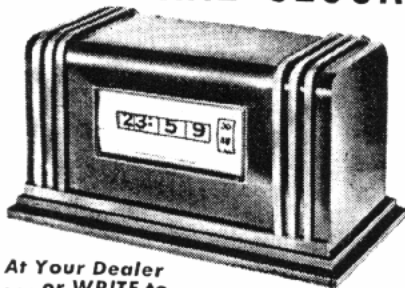
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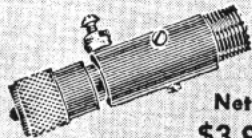
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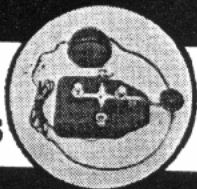
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Dynamotor brushes for DM-35 and DM-37. 50¢ per pair post paid. Bill Jones, 129 Davis St., Eufaula, Alabama.

HQ-110 Receiver, matching clock and speaker, perfect condition, \$165.00. Harvey-Wells TBS-50D transmitter, with power supply, good condition, \$35.00. K2EFC 94 Division Avenue, Belleville 9, New Jersey.

FOR SALE: HANDBOOK 4-250A Kilowatt Amplifier complete with tubes for A.M., C.W. and S.S.B. AB1 or AB2 with many extras. Built-in regulated bias supply, screen modulation choke for A.M. and 2.5KV voltmeter to measure plate voltage. Completely debugged and de-TV'd. Jennings UCS 10KV vacuum variable 10-300 mmfd alone cost \$105. Total cost of parts \$337.70. Will sell F.O.B. Belvidere for \$225. Larry Kleber, K9LKA, Belvidere, Illinois.

SX101 Mark III, just like new, matching speaker, headphones, express collect original carton \$225.00. Instructograph with complete tapes \$25.00. Vaughan Moore, West Point, Virginia.

RTTY 455 polar relay like new \$2.95 PP. Relay socket 75¢ Teletype chadless tape splicer, new, \$3.00 PP. K9CNG, Vandalia, Illinois.

ATTENTION: Knight T-50 transmitter and Knight R-100 w/s-meter and speaker. First \$90.00 takes both. Will ship. K8TOB/VE3, 1 Seneca Crescent, Brantford Ontario, Canada.

SELL: HQ-170 w/clock \$235.00. DX-40, VF-1, Johnson low pass, novice xtals (5), Dow coax relay and coax, all \$65.00. Jack, WA2DZS, CY 8-0594, Bronx, New York.

USED: Johnson Viking II, excellent condition \$200.00. Will ship anywhere in USA, PP. Knox Electronic Supply, 67 N. Cherry St., Galesburg, Illinois.

\$.19 per watt HB xmtr 800 watts, AM-CW all band 4 separate power supplies. Good VFO Final—pair 813's Modulator—pair 811A's. Separate supply for buffer-driver stages. Good shape \$150. Shipping extra. We're going SSB. Write WA2KDW, Joseph Gontogenis, 207 Dykman Street, New York 40, N. Y.

3-400Z, 3-1000Z [from page 58]

filament tap point for C₂ occurs near to the top (filament end) of the coil. Adjustment of the tap-point may not be required.

It may be somewhat easier from a mechanical point of view to substitute a pi-network input circuit for the parallel LC circuit, as shown in fig. 3. Untuned filament chokes are used to supply filament voltage to the tube, and a simple fixed tuned pi-network circuit is employed to couple the exciter to the filament circuit of the 3-1000Z. The transformation ratio of the network is 1:1, matching the line to the tube, yet providing the Q necessary for proper circuit operation. The pi-network circuit and filament choke may be used for the 3-400Z tube, if desired.

C.W. Results [from page 68]

LZ2KBI .. 12,096 211 9 33 (Club Station)	OK1KCU .. 15,170 133 23 59 (Club Station)
LZ2KAG .. 10,528 186 9 38 (Club Station)	OK1KCI .. 1,001 77 3 10 (Club Station)
LZ1KDZ .. 8,692 190 8 33 (Club Station)	England
LZ2KST .. 6,000 132 9 31 (Club Station)	G30HM .. 11,259 123 26 55
LZ1KLB .. 1,116 132 4 14 (Club Station)	Finland
Czechoslovakia	OH2AA ... 95,475 342 55 146 (OH2KH, OH2KK, OH2LP)
OK3KAB .. 172,556 341 75 166 (Club Station)	OH9AB ... 2,480 58 13 27 (OH9NZ, OH90Q)
OK3KAG .. 50,840 347 31 93 (Club Station)	Germany
OK3KAS .. 45,430 295 27 91 (Club Station)	DL3YQ ... 61,468 235 45 82 (DL3Y0, DJ2JE, DJ5LE)
OK1KSO .. 24,024 212 23 68 (Club Station)	DM3BB .. 46,217 366 30 83 (3 Operators)
OK2KHD .. 17,840 182 21 59 (Club Station)	DM2ATL .. 44,516 291 32 92 (2 Operators)
	DM3BM .. 42,003 242 47 76 (6 Operators)

Re
 Y03KAA .. 19
 Y02KAB .. 14
 Y02KBB ..
 Y04KAK ..
 Y06KAF ..
 Y04KBJ ..
 S
 3L2ZA .. 1
 (SM2BGG)
 SM6CCA ..
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 YU3BUV .. 4
 YU2HNO ..
 UA3KWA .. 2
 UA3KMB ..
 UA4KHW ..
 UA6KAE ..
 UA3KUA ..
 UA3KIB ..
 UA6KTB ..
 UA3KYA ..
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 W3WG
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 K6EVR ... 3
 (W6)
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 UA0KYA ..
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 W2FXN
 W1UQP
 W5ARJ
 K6OHJ
 W8HA
 K9GTK
 CX2BT
 DM1066/1
 DM3LF
 F8DF
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23 26 55

2 55 146
K, 0H2LP)
8 13 27
Z, 0H90Q)

5 45 82
E, DJ5LE)
i 30 83
Operators)
32 92
Operators)
47 76
Operators)

Roumania		UA3KAM . 5,047 74 14 35 (Club Station)	Estonia	
Y03KAA . 198,504 602 59 157 (Club Station)		UR2KAE . 71,526 421 35 96 (Club Station)		
Y02KAB . 142,044 588 40 93 (Club Station)		UR2KAW . 67,158 454 35 91 (Club Station)		
Y02KBB . 6,588 92 17 37 (Club Station)		UR2KAH . 6,965 183 8 27 (Club Station)		
Y04KAK . 4,680 99 11 25 (Y04WA, Y04AH)		UR2KAG . 1,770 65 7 23 (Club Station)		
Y06KAF . 1,428 51 8 20 (Club Station)			Latvia	
Y04KBJ . 6,000 121 8 32 (Y04CS, Y04ZL)		UQ2KAA . 48,372 410 32 83 (Club Station)		
Sweden			Moldavia	
3L2ZA . 15,844 187 20 48 (SM2BGG, SM2ALT, SM2BJS)		U05KAA . 147,562 696 47 131 (Club Station)		
SM6CCA . 1,104 46 5 18 (SM6CCA, SM6CMU)			Ukraine	
Yugoslavia		YU3BUV . 43,164 272 32 77 (Club Station)	UB5KAB . 637,980 968 101 271 (Club Station)	
YU2HNO . 6,255 95 11 34 (Club Station)		UB5KED . 182,380 570 62 158 (Club Station)	UB5KAG . 125,685 434 50 139 (Club Station)	
U.S.S.R.		UB5KBA . 70,680 329 38 114 (Club Station)	UB5KEF . 45,617 298 31 90 (Club Station)	
European		UB5KDS . 9,936 77 25 47 (Club Station)	UB5EF . 8,848 120 14 42 (Club Station)	
UA3KWA . 233,760 640 67 186 (Club Station)		UB5KBA . 70,680 329 38 114 (Club Station)	White Russia	
CA3KMB . 46,860 224 36 96 (Club Station)		UB5KEF . 45,617 298 31 90 (Club Station)	UC2KAB . 196,253 611 64 163	
UA4KHW . 29,953 225 23 54 (Club Station)		UB5KDS . 9,936 77 25 47 (Club Station)		
UA6KAE . 29,280 212 27 53 (Club Station)		UB5EF . 8,848 120 14 42 (Club Station)		
UA3KUA . 24,831 229 26 67 (Club Station)			Oceania	
UA3KIB . 22,134 168 19 74 (Club Station)			Australia	
UA6KTB . 13,570 241 11 24 (Club Station)			VK5NQ . 296,185 566 67 118 (VK5NQ, VK5NO)	
UA3KYA . 9,900 111 19 47 (Club Station)				

MULTI-OPERATOR Multi-Transmitter

North America		Europe	
W3A0H . 1,049,104 820 141 323 (W3A0H, W3LMM, W3MVK, W3QJJ, W3UHN, W3VKD, W3WGH, K3DKD)	W3MSK . 1,024,373 883 132 295 (W3PZW, W3KZQ, W3MCG, W3FYS, W6H0H/3, W3MSK)	OK1KKS . 766,824 1309 100 259 (Club Station)	OK2KFK . 60,060 312 39 104 (Club Station)
W6RW . 725,139 814 111 210 (W6RW, K6EVL, K6KII, W6YMD, W6KFW)	K6EVR . 391,770 544 99 171 (W6GFE, W6UED, K6EVR)	G3JUL . 7,458 111 16 50 (G3JUL, G3LOV, GM3H0M)	OH1AA . 181,792 454 66 181 (Club Station)
Asia		DJ3JZ . 864,930 1245 98 232 (DJ3JZ, DL1CR, DJ1BP, DL3AO, DL9CI, DJ1BZ, DJ4LI)	UA3KAA . 250,776 903 53 163 (Club Station)
UA0KKB . 157,460 486 58 81 (Club Station)	UA0KYA . 29,328 220 34 44 (Club Station)	UA4KYA . 249,964 871 66 181 (Club Station)	UB5KBB . 960,960 1460 110 310 (Club Station)

Our thanks to the following Stations for sending us their Logs for checking purposes.

W1MD	G3KKP	OK1EV	OK3KGI	SM5BHW
W2FXN	HB9IX	OK1KIY	OK3KGO	SM5BKO
W1UQP	JAIJA	OK1TJ	OK3KHE	SM5BPJ
W5ARJ	JA1LN	OK1WD	OK3KI	SM6CU
K6OHJ	JA8FO	OK1ZW	OK3ZM	T12DN
W8HA	LA2B	OK2UZ	OY7ML	VK3GE
K9GTK	LA3SG	OK3AL	PA0LY	YV5FK
CX2BT	LA6CF/M	OK3CAT	SM3CJD	ZE3JJ
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