



WA5RXT, one of the ops at W5YG.

## Results, 3rd ARRL 160-Meter Contest

Reported by Rick Niswander\*, WA1PID

**E**VEN THOUGH THE 160-METER contest has passed through the "terrible twos" and is now in its "traumatic threes" the growing pains common to most growing babies and contests have not yet appeared. In fact, this "baby" is shrinking. The third annual 160-meter contest, held December 8-10, showed a drop in entries from 272 in 1971 to 248 in 1972. Conditions alone cannot be cited for this decrease. W9PNE garnered 46 sections using less than 5 watts and W7DOL/6 worked a European. Participation does not seem to be the culprit either. Over 1000 different calls were listed by entrants. Where is the problem? Is it a lack of log-mailing initiative on the part of those with smaller scores? Since no logs are required, is this contest considered more "fun" than competition with the resultant lack of enthusiasm to put your log in the mails? Probably these and many other hypotheses are, in part, correct. Next year, send in your log, large or small. If you don't want your score to be entered in the listings, just label it a check log. If we can get half as many entries as we have participants we can really have a humdinger of an entry total.

Almost without exception, the pictures submitted this year were of extremely good quality.

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The choice of which ones to pick was particularly difficult. However, if yours did not show up please try again next year.

The most prevalent comment concerned frequency usage. Some deplored the crowding of 1800-1825 kHz while 1830-1850 was practically vacant. Anyone who can operate in the lower band segment can operate from 1830-1850 kHz with slightly less power. It's a great way to get away from the QRM on the bottom end. The other frequency usage comment concerned the use of 1825-1830 by W/VE stations. For those of you unfamiliar with this segment it is known as the "DX Window." For many years this segment has been voluntarily "reserved" for use by DX stations so they can be heard more readily by those of us on this end. Usually the DX station transmits from 1825-1830 and listens in the bottom 10 kHz of the band. The presence of a W/VE station between 1825 and 1830 can destroy the segment for those straining to hear a DX station. Keeping these frequencies clear not only will help others trying to work DX but it might allow you to hear some too.

Awards are scheduled for a June 15 mailing.

### Soapbox

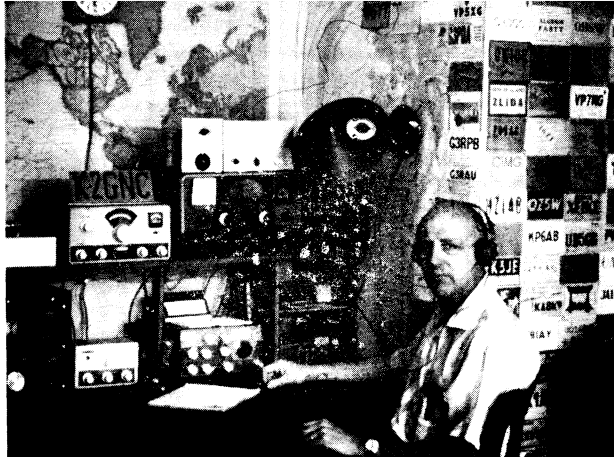
Worked first European in almost 40 years of trying. G3ZEM. WOW! After that I wasn't much good the second night. — (W7DOL/6) G3ZEM was so loud (589) that I could hardly believe he was in England. Such beautiful skip! — (W0AIH) Grand



K5PFL operated up a storm at W5SZ using a Drake-Line and 3 (count 'em, three!) bobtail curtain antennas. The big antennas helped Richard snag 74 multipliers, including 3 Europeans (all G3s), and take 4th spot nationwide. This is the first time a five has broken into the Top 10.

**QST for**

For the second year in a row K2GNC keyed his way to the NLI section leader certificate. He was aided in his quest by an excellent antenna system consisting of two 90 foot verticals spaced 130 feet apart and phased to squirt a big signal NE or SW. The verticals are of homebrew construction, using an irrigation pipe at the bottom and fiberglass quad arms on top. The ground system consists of over 3 miles of wire. Bill doesn't do too bad on the "high bands" either judging from his assortment of QSLs on the wall (how many of you have cards from the likes of MD1D, C1MG or ZD2RGY?).



show. Made 32 DX QSOs in 14 countries. Enjoyed every minute. — (W1BB) Half-DXCC now on 160 with OE5KE and OA8V as numbers 49 and 50. — (W4YWX) Many stations said they had worked me before. Turns out that W2FJ/2 was the busy one. And both of us portable! — (K2FJ/2) Worked more stations on 160 the one evening I was on for the contest than I had since I operated loop modulated phone on 160 in 1930. — (W5KL) Worked more JAs than W1, 2 and 3 combined. Heard VS6DO and OA8V but no luck. — (WA6PGB) Wind chill factor here was 52 degrees below zero! At 2300 GMT I discovered my folded dipole (only antenna) was 16 feet too long. In the dark and cold the XYL and I fixed it. That's devotion. — (KØIJP) Surprised what a Ranger and a long wire will do on the top band. — (K4PJ) Both DL9KR and HB9NL were heard ½ hour before local sunrise though at the time they were in QSO with Europeans. — (W2BP) My first 160 meter contest. Great fun. — (WB4RUA) Very good conditions. Remarkably similar to last year but with better DX participation. — (W3IN) Surely a lot of signals packed into 25 kHz at times. Interesting to note the proportion of hand keys and bugs being used in comparison with Sweepstakes and CD Parties. Can't remember working so many WVA stations in a contest for years — three! — (W8JWX) Just moved into new house - no antennas. Put up my loaded dipole Saturday afternoon. Center was 14 feet off ground, ends about 4 feet up. My congratulations to those who heard me. — (W4YOK) It is a great contest. Keep it like it is. — (K4FU) My first try at 160 meters. Very challenging and a lot of fun. — (K1CSJ/1)

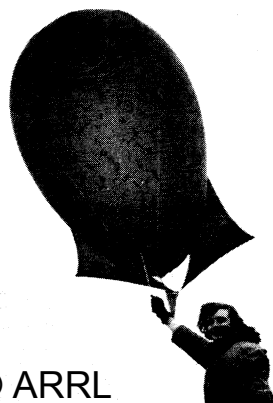
### DIVISION LEADERS

Single Op.	Division	Multiop.
W3IN	Atlantic	WA2WLN/2
WA9MCC	Central	W9YB
WØAIH	Dakota	.....
W5SUS	Delta	.....
K8CCV	Gr. Lakes	W8LT
WA2UOO	Hudson	WA2SPL
WØNFL	Midwest	.....
K1PBW/1	New Engl.	W1KVI/1
K7IDX	Northwestern	.....
WA6DKF	Pacific	.....
K4CIA	Roanoke	WA4DUS
WAØCVS	Rocky Mt.	WØMS
W4YWX	Southeastern	.....
W7DOL/6	Southwestern	W6YRA
W5SZ	West Gulf	W5YG
VE3BMV	Canadian	VE1MX

### TOP TEN

Single		Multi	
WA9MCC/9	76,923	WA2WLN/2	56,800
W3IN	75,208	WA4DUS	43,554
K1PBW/1	67,002	W8LT	39,650
W5SZ	64,528	WA2SPL	38,880
VE3BMV	60,336	W9YB	38,316
K8CCV	58,032	W9MAF	26,790
W9DL	56,587	WØMS	25,144
WØAIH	54,040	WA8ZDR	24,698
K4GSU	52,570	K8BYI	24,000
K4CIA	51,191	W1KVI/1	23,550

The object being held by WA1LKU/8 (one of the ops at the multi setup of W8LT) is a kitoon. For the uninitiated a kitoon (pronounced "kite-oon" with accent on the first syllable) is a cross between a kite and a balloon. The idea was developed in the fertile mind of W8ERD (who has conjured up other schemes such as a 20 meter corner reflector for FD) in order to cope with the swirling winds around the Ohio State University stadium, home of Woody Hayes and W8LT. The inflated kitoon supported the top of a quarter-wave ground plane antenna which helped the group to a fine third place national finish.



<b>VE</b>	<b>W2UKA</b>	<b>750- 25-15- 3</b>	<b>W5GWD</b>	<b>728- 26-14-15</b>	<b>W7IMP</b>	<b>84- 7- 6- 2</b>
<b>Maritime</b>	<b>3</b>		<b>New Mexico</b>		<b>Utah</b>	
VE1ASJ 9120-120-38-	<b>Eastern Pennsylvania</b>		W5NGJ 1512- 36-21-11		WA7OAU 6536- 86-38-11	
VE1MX (+VE1s EK OM	W3BUR 24,804-231-53-16		W5BHN 1152- 36-16-		W7CYH 5640- 94-30- 9	
15,540-179-42 27	W3HUS 22,736-232-49-14		W5RE 728- 26-14-		<b>Washington</b>	
<b>Ontario</b>	W3AJS 12,600-180-35-20		K5FIQ (WB5s DCC DYY)	5808- 88-33-	K7IDX 18,036-164-54-28	
VE3BMV 60,336-410-72-	W3CNS 11,934-153-39-10		<b>Northern Texas</b>		W1BVP/7 7488-104-36- 8	
VE3BFK 9450-135-35-22	W3QOR 8844-134-33- 7		W5SZ (K5PFL, opr.)	64,528-424-74-24	W7IU 5760- 96-30-14	
<b>British Columbia</b>	W3ADE 8580-130-33-15		<b>Oklahoma</b>		W7FSF 1892- 43-22- 5	
VE7HQ 10,496-128-41-20	<b>Delaware</b>		K5JVF 11,832-116-51-20		W7FIM 990- 33-15- 8	
<b>U.S.A.</b>	W3GL 19,008-216-44-12		W5VAP 1748- 46-19-11		K7UWT 6- 3- 1- 1	
<b>1</b>	W3GSM 160- 10- 8- 1		K5QNM/5 (+WB5GYU)	2- 1- 1- 2	<b>8</b>	
<b>Connecticut</b>	<b>Maryland-D.C.</b>		<b>Southern Texas</b>		<b>Michigan</b>	
K1PBW/1 67,002-374-78-29	W3IN 75,208-443-79-30		W5SBX 46,434-321-71-28		K8VQP 32,034-281-57-	
W1SG 12,046-154-38- 9	W3VAN 24,158-257-47-22		W5RTO 40,120-289-68-24		W8JUN 30,683-247-61-15	
K1ZND* 8192-128-32- 5	W3IRE 12,236-161-38-21		W5ZNY 14,335-151-47-10		W8OOR 16,380-182-45-22	
WA1ODX 7874-127-31-16	W3AIEY 7656-116-33- 4		W5YG (WA5s FTP RRL RXT)		W8TBZ 16,128-168-48-19	
W1GNC* 6912-108-32- 6	W3FA 5304- 78-34- 4		K5DEG (+WB5CKM)	22,736-196-58-26	K8LIQ 12,560-157-40-27	
W1BIH 5600-100-28- 9	W3AXW 2750- 55-25- 3		K5LZJ (+K5SOR)	5032- 74-34-22	W8IBX 8214-111-37- 8	
W1QV 3618- 67-27-	W3KE 1054- 31-17-				W8BDSG 2156- 49-22- 6	
WA1GFH 900- 25-18-	<b>Western Pennsylvania</b>				WA8ZDR (+WA8SJZ)	
W1YNC/1 234- 13- 9- 3	W3UHP 15,088-184-41-20				K8BYI (W8KAZ WA8WCZ)	
W4WFL/1* 24- 4- 3- 1	W3HDH 6464-101-32- 7				24,000-240-50-22	
<b>Eastern Massachusetts</b>	W3SN 4686- 71-33- 7				<b>Ohio</b>	
W1PL 25,755-242-51-29	W3BZN 3172- 61-26-23				K8CCV 58,032-394-72-30	
WA1CTT 7232-113-32-	<b>4</b>				K8HKB 46,308-333-68-35	
W1AX 4050- 75-27- 4	<b>Alabama</b>				W8DB 43,996-322-68-19	
W1AIED 3264- 68-24- 7	W4AUP 660- 22-15- 3				W8OK 31,992-258-62-14	
W1BB/1 2720- 38-17-14	<b>Eastern Florida</b>				W8QHW/8 20,384-179-56-	
W1DDC 1156- 34-17- 9	W4BRB 28,768-217-62-24				W8AQ 8736-112-39- 9	
<b>Maine</b>	W7UXP/4 17,649-156-53-17				W8PCS 4672- 73-32- 5	
K1VBL 6510-105-31-	W4OZF 8772-102-43-10				W8FAZ 2256- 47-24- 6	
WA1NMW 1840- 46-20-10	<b>Georgia</b>				W8VZE 1020- 30-17- 8	
W1KVI/1 (K1s GAX MTJ OYB	W4YWX 31,936-230-64-21				W8LT (WA1LKU W8ERD W8BS	
RQE WA1KVV)	W4RUA 12,048-124-48-13				CLF DEA)	
23,550-225-50-	K4BAI 7416-103-36- 7				39,650-325-61-40	
<b>New Hampshire</b>	W4DXI 3567- 60-29- 7				WA8YWX (+W8IDM)	
W1FZ 6156-114-27-	<b>Kentucky</b>				20,000-200-50-16	
K1CS/1 4000- 80-25-	K4GSU 52,570-368-70-18				<b>West Virginia</b>	
<b>Rhode Island</b>	K4FU 41,478-333-62-20				W8APH 18,228-186-49-12	
W1OP (K1HZN, opr.)	K4QW 24,416-215-56-13				K8OOL 8896-139-32-10	
7380-123-30-15	W4YOK 1656- 36-23-				W8JWX 5974-103-29- 8	
<b>2</b>	<b>North Carolina</b>				<b>9</b>	
<b>Eastern New York</b>	K4CIA 51,191-350-71-24				<b>Illinois</b>	
W2LWI 15,268-169-44-	W4TMR 21,344-232-46-27				W9DL 56,587-394-71-22	
W2AGQ 5016- 76-33- 8	K4EOA 9398-124-37- 8				W9YYG 39,468-293-66-26	
K2BQO 4428- 82-27-14	K4CAX 4032- 72-28- 6				W9ABA 19,200-192-50-17	
W2AKUL 308- 14-11- 2	WB4RCB (K4s DTO JLW				W9MTT 13,254-141-47-12	
WA2SPL (+WB2OEU)	W4OTE WB4s CIN PKC UOU				W9MDWG 13,104-156-42-17	
38,880-321-60-	WN4CFA)				W9PNE 13,064-142-46-16	
<b>N.Y.C.-L.I.</b>	12,284-166-37-30				W9BMY 12,080-151-40-14	
K2GNC 21,903-201-49-	<b>Tennessee</b>				W9BGJY 5280- 88-30-15	
W2KTU 4128- 86-24-10	K4PJ 12,300-150-40-12				W9HVP 2024- 44-23-	
K2VGD 1760- 40-22- 6	W4UD 3510- 65-27- 4				W9REC 288- 16- 9- 3	
<b>Northern New Jersey</b>	<b>Virginia</b>				W9MAF (+W9MTD)	
WA2UO 28,077-285-49-20	K4CG (WA8RGJ, opr.)				26,790-235-57-28	
W2EQS 26,832-272-48-32	W4WSF 18,906-204-46-12				<b>Indiana</b>	
WB2URU 14,022-171-41-28	W4KFC 12,000-150-40-				W9BRN 32,940-270-61-21	
W2AQT 13,246-179-37-17	W4ZM 11,160-138-40- 8				WA9AUM 18,666-183-51-	
W2HUG 12,384-172-36-13	K4TS 10,062-129-39-15				W9SFR 7040- 88-40-13	
W2GBY 6936-102-34-13	W4KXV 8991-120-37- 6				W9UC 1564- 34-23- 7	
WA2HMK 2400- 48-25- 8	W4KMS 1368- 38- 6				W9YB (WA2TGL WB2RKK	
W2LQ 1380- 46-15-10	WA4DUS (+K3RUQ W4s GRM				WA5BRB WB6DVR WA9VYJ)	
W2NYU 990- 33-15-12	PRO)				38,316-309-62-	
W2CVW 960- 30-16-	43,554-351-61-34				<b>Wisconsin</b>	
W2MPP 336- 21- 8-	<b>Western Florida</b>				WA9MCC/9 76,923-489-77-24	
K2LRE 240- 15- 8- 9	WB4VUP 14,100-150-47-22				WB9AVN 18,660-205-46-25	
<b>Southern New Jersey</b>	<b>5</b>				K9OXY 9506- 97-50-	
K2GAL 22,400-221-50-	<b>Arkansas</b>				K9REE 8288-112-37-11	
WA2KWB 10,360-140-37-	W5SUS 34,036-254-67-25				<b>0</b>	
W2BP 6600- 63-44-12	W5KL 7210-103-35- 4				<b>Colorado</b>	
WA2WLN/2 (+WA2SRQ	<b>Louisiana</b>				WA0CVS 40,950-312-65-22	
WA3FFR)	WASQBO 16,464-165-49-				W0MS (+WB0CMM)	
56,800-400-71-	W5MPX 8816-116-38-22				25,144-223-56-	
<b>Western New York</b>	WB5EKK 176- 11- 8- 4				<b>Iowa</b>	
W2UWD 19,208-196-50-35	<b>Mississippi</b>				W0NFL 37,310-284-65-29	
W2QIP 11,914-161-37-14	WASNYG/5 3024- 63-24-				WA0TVD 22,464-208-54-29	
W2FHU 8052-122-33-14					WA0VDX 16,000-160-50- 7	
K2PKK 3950- 79-25- 6					W0II 9976-116-43- 7	
K2FJ/2 1900- 50-19-15					K0PUB 7776-108-36-12	
					W0RFT 6864-104-33-15	

WA2WLN shown operating multiop WA2WLN/2 at the US Coast Guard EE Center in SNJ. The large grey box behind the Drake-Line is a LORAN-A transmitter that puts out 160 KW pulses. Behind the oscilloscope is an amplifier capable of one megawatt pulse power. The LORAN gear was not in use at the time of the contest (I suppose interference problem could have arisen). Doug was assisted by WA2SRQ and WA3FFR in racking up the highest multioperator score in the contest. Their antenna was a beach-mounted quarter-wave vertical (used for testing the LORAN equipment) with 120 radials, each 150 feet long. By the way, LORAN gear cannot be used on cw.



Kansas		Nebraska	
W0PSF	27,120-226-60-22	WB0DHR	8362-113-37-16
K0KU (WB0FGV, opr.)			
	19,344-186-52- 9	North Dakota	
W0ODT	12,500-125-50-22	W0SDN	8446-103-41- 6
W0FCL	2808- 54-26- 8		
Minnesota		South Dakota	
W0AIH	54,040-383-70-21	W0IT	1560- 39-20- 3
W2TA/0	32,116-259-62-20		
K0IJP	18,706-199-47-	FOREIGN	
W0HW	13,104-156-42- 8		
W0YCR	6392- 94-34-	Cuba	
W0RHI	5632- 88-32-	CO2QR	70- 7- 5-
W0BHA	5184- 81-32-12		
W0IH	4964- 73-34- 7	Bolivia	
		CP1EU	32- 4- 4-
Missouri		Ireland	
W0OFX	26,040-210-62-	EI9J	660- 22-15-
W0BV	960- 30-16- 4		

Switzerland		Austria	
HB9NL	112- 8- 7-	OE5KE	56- 7- 4- 6
Japan		Czechoslovakia	
JA7MJ	126- 9- 7-	OK1ATP	216- 12- 9-
JA0DAF	84- 7- 6-	OL1AOH	120- 10- 6-
JA9BOH	18- 3- 3-	OK1MCW	8- 2- 2-
Peru		Check Log	
OA8V	1584- 36-22-	VE7XN	