# Results of the 2020 CQWW 160 Meter Contest

Topband Can Be a Wonderful Obsession

# BY ANDY BLANK,\* N2NT

ew people would disagree that VY2ZM and K1LZ have a couple of the biggest 160-meter stations in the world. So where did they operate the 2020 CQ 160 Meter contest? Why, Mongolia, of course!

Chak, JT1CO, invited Jeff and Krassy to operate Multi-Op along with Roman, RN5M, and Sergey, UAØSC, at his fine station at JT5DX. With a 4-square and two Beverages, the team made 1.3M points with over 1,400 QSOs. I am sure they made a lot of people happy with a great multiplier and some All-Time New One (ATNO) QSOs.

Of course, that didn't stop Velimir, K3JO, from operating the K1LZ super station and taking top U.S. honors on CW, just edging out Jeff's brother Peter, K3ZM, by only 1.5%. The same results occurred on SSB with K1LZ and K3ZM, but conditions were not nearly as good as CW.

The top score in Multi-Op CW was earned by the S5 team with an amazing story of a "Field Day" setup on Lampedusa Island as IG9/S59A. With only 700 watts to the transmit antenna, and no in-band receiving capability, it was a challenge. They fought the elements and still scored nearly 3M points. Congratulations guys! Coming in second was the seasoned team of TAs and Ukrainian ops at TCØX, which were edged by less than 1%. A great job by both teams.

The Ironman Award goes to Stan Stockton, K5GO/ZF5T, who grabbed the combined score trophy on both modes. Stan's seaside QTH in the Cayman Islands is a 160-meter hot zone and his booming signal is guite amazing.

Many thanks again to the Bavarian Contest Club (BCC), which had 214 entries this year, which topped last year's 195. They almost doubled the next club down, Potomac Valley Radio Club (PVRC) at 22M points. Additionally, the 40M point total is a full 25% higher than 2019. Congratulations to the BCC and thanks for your fantastic support of the contest. Clearing 10M total aggregated score are the Frankford Radio Club, Rhein Ruhr DX Association, Ukrainian Contest Club, and the Yankee Clipper Contest Club.

The CQ 160 Committee is proud that the rules have been changed to allow Low-Power operation in the immensely popular Assisted categories. Until now, the rules only allowed High-Power operation. All scores are sorted in our official database, located at CQ160.com and can be sorted by categories.

A new record of 3,051 logs was received for CW. Single-Op Assisted was the most popular category with 1,362 entries, followed by 1,276 Unassisted entries.

### **CW Results**

I always love quoting from the #2 U.S.A. Single-Op entrant Peter, K3ZM, who has a unique perspective on the CQ160



Here is Chak, JT1CO, with his good friend Krassy, K1LZ, having a great time with Chak's excellent station.

competition: "Did anybody manage to get the elusive Maine multiplier? :)"

There were 11 entries from Maine, with three scores over 1M points. K1LZ, K1DG, and K1A all did it, but K1DG was the only one of the three who was actually there! Bill, KO7SS, operated K1A from Arizona.

The conditions were fantastic on CW this year. Not quite a repeat of the once-in-a-lifetime conditions of 2009, but quite good. Propagation across the Atlantic was solid both nights. There were so many scores in the millionaires club, there are too many to list here.

It's a sign of the times that there are so many remote operations in use these days. K3JO's operation from K1LZ was done remotely to earn first place in the U.S.A. 2018 Single-Op winner N5DX returned to the category as a remote operator from N2QV, this time placing third in U.S.A. N2TTA and K4BAI both operated remotely as NP2P and PJ4A. They placed third and fifth, respectively, in the highly competitive Single-Op DX category. They couldn't overtake Uli, DL5AXX, who traveled to CR3W for the top spot, or Stan, ZF5T, for second place in the world; both operating the traditional way at the station sites. Stan is the father of N5DX, so remote operation can't be too far off for him as well.

In Single-Op Low Power, five stations were able to make over 1,000 QSOs: 3V8SF, MU2K, LY4L, KD4D, and 4O3A. Ash, KF5EYY, operated 3V8SF to the top World spot from

<sup>\*</sup> director@cq160.com

World Single Operator Combined SSB/CW Stan Stockton (ZF9CW) ZF5T

Donor: Ed Parish, K1EP

World Multioperator Combined SSB/CW Valery Zhytkovich EW5A (EW6W, RD1A, RT1M, RT9T, RW1F, EU6AF ops) Donor: Juan Carlos Munoz, TG9AJR

CW SINGLE OPERATOR World Ulf Ehrlich (DL5AXX) CR3W Donor: Paul Newberry, N4PN Memorial (by N4RJ)

U.S.A VELIMIR DERIC (K3JO) K1LZ Donor: Milt Jensen, N5IA, Memorial by Arizona

Outlaws Contest Club Canada

John Sluymer VE3EJ Donor: VE2XAA Memorial by Thor Stefansson, TF4M

> U.S.A. - Zone 3 John Barcroft K6AM

Donor: Bruce Butler - W6OSP Memorial

U.S.A. - Zone 4 Bryan Bydal W5MX Donor: Steve Schmidt, K4WA

U.S.A. - Zone 5 Peter H Briggs K3ZM Donor: Jim Monahan, K1PX

Africa Luca Aliprandi (IK2NCJ) D4C Donor: James "Skip" Riba, WS9V

Asia Pavel Kukushkin UN9L Donor: Missouri DX/Contest Club, K4SX

Europe Pavel Prihoda (OK1MU) OK6W Donor: Emir-Braco Memic, E77DX

South America John T. Laney III (K4BAI) PJ4A

Donor: John Rodgers, WE3C Oceania

Akito Nagi (JA5DQH) KH7A Donor: Will Angenent, K6ND

European Russia Igor Avdeev UA2FZ Donor: CQ 160 Contest Committee

Japan Shige Tsukeshiba JH2FXK Donor: Alabama Contest Group

North America Stan Stockton (ZF9CW) ZF5T Donor: N4IN Memorial CQ Magazine PLAQUE WINNERS AND DONORS Southern Hemisphere

Osvaldo A. Santarone (LU5DF) LU8DPM Donor: Robert Kile, W7RH

World Assisted Mathias Kolpe (DL4MM) P4ØAA Donor: Andy Chesnokov, UA3AB

Asia Assisted Sergey Moskaev R8TT Donor: Jon Zaimes, AA1K

Europe Assisted Krzysztof Sobon SN7Q Donor: DK5DC Memorial by DX-Hotel DM9EE

> U.S.A. Assisted Dennis Egan W1UE Donor: Akito Nagi, JA5DQH

U.S.A. Assisted – Zone 3 Larry Pace N7DD Donor: Larry Pace, N7DD

U.S.A Assisted – Zone 4 Victor A. Kean, Jr. K1LT Donor: Pete Michaelis, N8TR

Assisted – Zone 5 Bill Straw (KO7SS) K1A Donor: Potomac Valley Radio Club

World Low Power Ashraf Chaaname (KF5EYY) 3V8SF Donor: Akito Nagi, JA5DQH

U.S.A. Low Power Mark Bailey KD4D Donor: Rich Kennedy, N4ESS

Asia – Low Power Valery Strelchenok UA9QM Donor: Robert Kile, W7RH

Europe Low Power Oleg Borisov (RL5D) MU2K Donor: DL1RK Memorial Petr Ourednik, OK1RP

> Canada Low Power Ric Guidone VE3XL Donor: Contest Club Ontario

World QRP Arunas Vaglys LY5E Donor: Wayne Mills, N7NG

U.S.A. QRP Marty Ray N9SE Donor: Bob Raymond, WA1Z

U.S.A. QRP - Zone 4 Charlie Hansen NØTT Donor: K9JWV Memorial by (WC7S)

Europe QRP Rudolf Rueffer DK7HA Donor: Peter Voelpel, DJ7WW MULTI-OPERATOR World Drago Turin S59A IG9/S59A (S51V, S52OT, S56N, S57DX, S59A ops) Donor: Paul Newberry, N4PN Memorial (by N4RJ)

U.S.A. John Crovelli W2GD (K2TW, KU2C, KZ2I, KS3F, N2HM, N2OO, W2CG, W2GD, W2NO, W2RQ, ops) Donor: WØCD Memorial (by K8GG and W8UVZ)

> U.S.A. Zone 3 Lee Finkel KY7M NA7TB (KY7M, NA2U, KC7V, AA7A ops) Donor: Tom Whitted, N7GP

Europe Petr Clupny OK7K (OK1BN, OK1GK, OK1NS, OK3RM, ops) Donor: Bob Evans, K5WA

ASIA Ali Riza Ozsaran TA3EL TCØX (TA3A, TA3AER, TA3EL, TA3LHH, UA9CDC, URØMC, US2YW, UT5ECZ, UT5EL, UW8SM, UZ5DX ops) Donor: Nodir Tursoon-Zadeh, EY8MM

SSB SINGLE OPERATOR World Jeffrey T. Briggs VY2ZM Donor: Nodir Tursoon-Zadeh, EY8MM

U.S.A. Velimir Deric (K3JO) K1LZ Donor: W4PZV/W4SVO Memorial (by NQ4I)

> Canada Peter Barron VE3PN Donor: Tom Haavisto, VE3CX

U.S.A. - Zone 3 Robert C. Lee N7AU Donor: Nate Moreschi, N4YDU

U.S.A. - Zone 4 Karl Brandt ND8DX Donor: Alabama Contest Group

U.S.A. - Zone 5 Peter H. Briggs K3ZM Donor: Brent Scott, WR5O

Asia Vladimir Falshunov R8WF Donor: Jessica Beckling, KN4JJA

Europe Branko Zemljak S57C Donor: James "Skip" Riba, WS9V

Asiatic Russia Boris Khakimzyanov UA9CAW Donor: Steven "Sid" Caesar, NH7C

North America Stan Stockton (ZF9CW) ZF5T Donor: CQ magazine – K2EEK Memorial

 $\downarrow$ 

South America Sergio Lima De Almeida PP5JR Donor: John Rodgers, WE3C

Oceania Dave Sullivan ZL2OK Donor: Steve "Sid" Caesar - NH7C

Southern Hemisphere Mario Raul Andraca Rivera LU8DPM Donor: John Rogers, WE3C

World Assisted Petr Clupny (OK1BN) OK7K Donor: K9HMB Memorial by Ray Sokola, K9RS

> Asia Assisted Sergey Moskaev R8TT Donor: Chuck Dietz, W5PR

Europe Assisted Rolandas Jokubauskas LY4A Donor: Curtis Rose, N2ZX

U.S.A. Assisted Bud Governale W3LL

Donor: Pete Michaelis, N8TR U.S.A. Assisted – Zone 4 Bud Foster

K4ISV Donor: Pete Michaelis, N8TR

World Low Power Brian Campbell VE3MGY Donor: Steve Molo, KI4KWR

U.S.A. Low Power George Verciuc W8CO Donor: Tim Duffy, K3LR

Europe Low Power Andrzej Lysakowski SP5CJY Donor: Contest Club Ontario

Canada Low Power Kevin Smith VA3AC Donor: Rudy Bakalov, N2WQ

World QRP Maksim Kesic E77Y Donor: John Rodgers, WE3C

MULTI-OPERATOR World Noah Gottfried (K2NG) PJ4G (K2NG, NE9U, KK9K, PJ4NX ops) Donor: Southeastern DX Club

U.S.A. Steve Kostro N2CEI (KØDI, N2CEI, K4SME ops) Donor: Jerry Rosalius, WB9Z

Europe Pavel Prihoda OK1MU OL7M (OK1CDJ, OK1CD, OK1JD, OK1MU, OK2ZAW ops) Donor: South Jersey DX Assocation, N2CW

Zone 3 Lee Finkel N7T (KY7M, N7NR, KC7V @NA7TB ops) Donor: Paulo, PV8DX



This fine station belongs to Cort, K4WI, who was first place in Alabama on SSB Low Power.



Here is John, K4BAI, operating PJ4A remotely from the comfort of KU8E's QTH. He has a fast internet connection.

Tunisia, while RL5D traveled to MU2K for second place World. Mark, KD4D, used the super station of W3LPL for his U.S.A. victory.

This was the first year that we have been able to separate Low- and High-Power rankings in the Assisted category, a long overdue change. CQ160 regular Low-Power winner Brian, VE3MGY, pointed out he has the new North American record for Single-Op Assisted Low Power. It occurred to me that EVERYBODY has set a new Low-Power record for Single-Op Assisted. There will be a listing on our official website to reflect all these as well. Of special note, and a tribute to the conditions, is the effort by Osvaldo, LU5DF, operating at the fine station of Mario, LU8DPM. Normally, QSOs from Argentina to the U.S.A. or EU are difficult due to the distance. But with a full size vertical and array of Beverages, they were able to make 488 QSOs and approximately 500K total score. Well done, guys!

In the most competitive category of Single-Op World Unassisted, there were no less than 16 scores over 1M points. But the top score of CR3W by DL5AXX really stands out, the only one over 2M points. However, that is nothing com-

## 2020 CQWW 160M CONTEST TOP SCORES

¥

	CW	SN
		Dł
1/11 7	USA 1 100 5 40	EL
K37M	1,128,548 1,112,238	
N5DX	1,065,912	0
K1DG	1,023,435	LY S5
W5MX	729,270 703,948	0H
N4XD		0
W4CB		HC
		9A L Y
W5ZN	590,117	40
	VE	0
VE3EJ	1,240,070	
VE3DZ		U۷
VE3VN		R7
VE3PN		R8
	419,616	R/
		RL U1
VE3KF	237,830 178,160	ËV
VE3BR		RI
		U)
	<b>Zone 3</b> 414,468	Ra
K7RAT		R7
WJ9B		R8 R1
AA6AA	231,413 204,952	R/
AC6DD		RL
N7GP		R
N7ZG		R/ R3
N6RK	146,219	Ra
;	Zone 4	R
	1,240,070	
W5MX	831,512 729,270	3\
NA8V	703,948	М
W5ZN		LY Ke
	530,292	40
		NØ
VE3PN	474,117	01
	QRP	9A Ly
LY5E	инг 	DL
DK7HA		
YL2QN	232,532	
HA8BE		KE NØ
S57M	207,309 205,261	Ŵ
0L4W		N
OK1LL		K1 K5
	159,100 143,468	Ka
LUTAA		K1
	DX	VE
CR3W		VE
ZF31 NP2P	1,956,080 1,523,162	
OK6W	1,516,020	NØ
PJ4A	1,474,667	Na
KP2M	1,448,912 1,358,012	KØ W
XE2X	1,352,124	Kk
NP2J	1,322,752	W
LY7Z	1,297,032	KE K3
7	one 14	KI
		W
CR6K	904,818	
DL1AUZ		IG
MII2K	706,414 574,752	TC
0Z1L0	563,530	P3
		Oł

Ð

SMØT	386,863	EW5
DK6XZ	341,360	RL3
EI7KD	341,352	4X2
		UA7
Zone 15		9A1
OK6W	1,516,020	
LY7Z	1,297,032	I
S53A	1,183,005	V02
0HØR	1,056,438	W20
OM7RU	778,146	K3L
HG5D	756,276	NR4
9A2AJ	728,178	KØD
LY4L	545,776	KM3
403A	502,980	N1L
OM5CD	499,668	N3E
		K2A
Zone 16		NA7
UX2X	1,014,253	
R7NW	978.588	
R8WF	726,732	+P4
RA3XM	489,552	+SN
RU3UR	448.154	+SN
UT7NY	435,288	+0N
EW1I	400.932	+LX
RN1A	385.360	+MX
UX1HW	352.968	+UA
R3ST		+LY
	, -	+YL
Russia		+LY
R7NW	978.588	
R8WF	726,732	
RT9A		+VA
RA3XM		+W1
RU3UR		+K1/
RN1A	385.360	+AA
RA9MA	373.503	+K3
R3ST	329.751	+K1
R3FX	309.463	+N3
RD4F	264.180	+VE
	- ,	+K2
LOW POWE	.D	+KV
	.n	
World	.n	
World		
<b>World</b> 3V8SF MU2K	956,970 574,752	
<b>World</b> 3V8SF MU2K	956,970 574,752	
World 3V8SF	956,970 574,752 545,776	K1L
World 3V8SF MU2K LY4L KD4D 403A	956,970 574,752 545,776 525,100 502,980	K1L K3Z
World 3V8SF MU2K LY4L KD4D	956,970 574,752 545,776 525,100 502,980 412,794	
World           3V8SF	956,970 574,752 545,776 525,100 502,980 412,794 382,120	K3Z
World           3V8SF	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567	K3ZI ND8
World           3V8SF	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068	K3ZI ND8 NA8 W3E
World           3V8SF	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068	K3Z ND8 NA8
World           3V8SF		K3Z ND8 NA8 W3E W12
World           3V8SF		K3Z ND8 NA8 W3E W12 K2X
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D	956,970 545,776 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100	K3ZI ND8 NA8 W3E W12 K2X W3T
World           3V8SF           MU2K           LY4L           403A           MØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI		K3Z ND8 NA8 W3E W12 K2X W3T W10
World           3V8SF	956,970 545,776 545,776 525,100 502,980 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 427,94	K3Z ND8 NA8 W3E W12 K2X W3T W10
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           WB8JUI           N8II	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637	K3Z ND8 NA8 W3E W12 K2X W3T W10
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           WB3JUI           N8II           K1EP		K3Z ND8 NA8 W3E W1) K2X W3T W10 K3Z
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           WB8JUI           N8II           K5KU		K3ZI ND8 NA8 W3E W1> K2X. W3T W10 K3ZI VY2
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           WB3JUI           N8II           K1EP		K3ZI ND8 NA8 W3E W1) K2X. W3T W10 K3ZI VY2. VY2.
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           W88JUI           N8II           K1EP           K3JT           K1DC	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 263,637 263,637 254,800 241,020 231,500 187,376	K3ZI ND8 NA8 W3E W1> K2X. W3T W10 K3ZI V22 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER V           KD4D           NØNI           WB8JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3XL		K3ZI ND8 NA8 W3E W1> K2X W3T W10 K3ZI V22 VE3I VE3I VE3I VE3I VA3.
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           W88JUI           N8II           K1EP           K3JT           K1DC		K3ZI ND8 NA8 W3E W1> K2X W3T W10 K3ZI V22 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           WB8JUI           NØNI           WB8JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3VSM	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637 254,800 241,020 231,500 187,376 178,160 157,960	K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           NØNI           NØNI           K1EP           K3JT           K1DC           VE3XL           VE3VSM	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 263,637 264,800 241,020 231,500 187,376 187,376 157,960	K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER V           KD4D           NØNI           WB8JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3XL           VE3VSM           QRP W/VE		K3ZI ND8 NA8 W3E W1) K2X W3T W1( K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER V           KD4D           NØNI           WB8JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3XL           VE3XSM           QRP W/VE		K3ZI ND8 NA8 W3E W12 K2X W3T W10 K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 263,637 263,637 264,800 241,020 263,637 254,800 241,020 263,637 254,800 241,020 263,637 254,800 241,020 251,050 	K3ZI ND8 NA8 W3E W12 K2X W3T W10 K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           WB8JUI           NØNI           W98JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3VSM           ORP W/VE           NØTT           N3CZ           KØPK           WB4MSG	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637 254,800 241,020 254,800 241,020 251,500 251,500 35,964 30,950 35,964	K3ZI ND8 NA8 W3E W12 K2X W3T W10 K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           WB8JUI           N8II           K1EP           K5KU           VE3XL           VE3XSM           QRP W/VE           NØTT           N3CZ           KKØU		K3ZI ND8 W3E W1> K2X W3T W3T W3T W3T V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER V           KD4D           NØNI           WB3JUI           N8II           K1EP           K5KU           VE3VL           VE3VL           VE3VSM           QRP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU		K3ZI ND8 NA8 W3E W1> K2X W3T W1(C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           MØNI           OK7Y           9A1AA           LY9A           DL6KWN           WB8JUI           NØNI           WB8JUI           N8II           K1EP           K5KU           VE3VSM           QRP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W96CC	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 W/VE 525,100 412,794 270,300 263,637 263,637 264,800 187,376 178,160 157,960 130,950 65,670 35,964 30,438 27,979 20,610 	K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 VE3 VE3 VE3 VE3 VE3 VA3 VE3 VE3 VE3 VA3 VE3 VA3 VE3 VA3 VA3 VA3 VA3 VA3
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           WB8JUI           NØNI           W98JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3VSM           ORP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W9CC           K20TT           K3TW	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637 254,800 241,020 254,800 241,020 254,800 241,020 251,500 157,960 35,964 30,9350 35,964 30,438 27,979 20,610 	K3ZI ND8 NA8 W3E W1> K2X W3T W3T W37 V22 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           WB8JUI           N8II           K1EP           K5KU           VE3XL           VE3XSM           QRP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           WB4MSG           KKØU           WSGCC           KE410	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637 254,800 241,020 263,637 254,800 241,020 263,637 254,800 241,020 31,500 157,960 35,964 30,950 65,670 35,964 30,438 27,979 20,610 19,366 16,605	K3ZI ND8 NA8 W3E W1> K2X W3T W10 K3ZI W10 K3ZI VE3 VE3 VE3 VE3 VE3 VE3 VE3 VE3 VE3 VE3
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           WB8JUI           NØNI           W98JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3VSM           ORP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W9CC           K20TT           K3TW	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637 254,800 241,020 263,637 254,800 241,020 263,637 254,800 241,020 31,500 157,960 35,964 30,950 65,670 35,964 30,438 27,979 20,610 19,366 16,605	K3ZI ND8 NA8 W3E W1> K2X W3T W1(C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           WB8JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3VSM           QRP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W9CC           KEØTT           K3TW           K14IO           WB2CPU	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637 263,637 264,800 241,020 231,500 187,376 178,160 157,960 35,964 30,950 65,670 35,964 30,438 27,979 20,610 19,395 19,366 12,002	K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           WB8JUI           NØNI           WB8JUI           N8II           K1EP           K5KU           VE3VL           VE3VSM           ORP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W92CPU           MULTI-OPERATOF	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637 254,800 241,020 263,637 254,800 241,020 35,964 30,950 35,964 30,438 27,979 20,610 19,395 19,366 12,002 <b>WORLD</b>	K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           W08JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3XL           VE3XSM           QRP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W92CC           KEØTT           K3TW           K1410           WB2CPU           MULTI-OPERATOR           IG9/S59A		K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER V           KD4D           NØNI           WB8JUI           NØNI           WB8JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3XSM           QRP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W9CC           KEØTT           K3TW           KI4IO           WB2CPU           MULTI-OPERATOF           IG9/S59A           TCØX		K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER V           KD4D           NØNI           WB8JUI           NØNI           WB8JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3XSM           QRP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W9CC           KEØTT           K3TW           KI4IO           WB2CPU           MULTI-OPERATOF           IG9/S59A           TCØX		K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23
World           3V8SF           MU2K           LY4L           KD4D           403A           NØNI           OK7Y           9A1AA           LY9A           DL6KWN           LOW POWER N           KD4D           NØNI           W08JUI           N8II           K1EP           K5KU           K3JT           K1DC           VE3XL           VE3XSM           QRP W/VE           NØTT           N3CZ           KØPK           WB4MSG           KKØU           W92CC           KEØTT           K3TW           K1410           WB2CPU           MULTI-OPERATOR           IG9/S59A	956,970 574,752 545,776 525,100 502,980 412,794 382,120 367,567 323,068 321,925 <b>W/VE</b> 525,100 412,794 270,300 263,637 263,637 264,800 241,020 241,020 231,500 187,376 178,160 157,960 130,950 65,670 35,964 30,438 27,979 202 	K3ZI ND8 NA8 W3E W1> K2X W3T W1C K3ZI V23 V23 V23 V23 V23 V23 V23 V23 V23 V23

EW5A	2.041.068
RL3A	2.016.540
4X2M	2,005,560
UA7K	1,937,250
9A1P	1,822,620
MULTI-OPERATO	
VO2AC	1 704 417
W2GD	1.395.468
K3LR	1,072,804
NR4M	890,960
KØDI	842,656
KM3T	/98,840
N1LN	090,828
N3EB K2AX	627 792
NA7TB	588.672
ASSISTED WO	
+P4ØAA	
+SN7Q +SN2M	
+0M7M	1 501 360
+LX2ØI	1,479,226
+MX5A	1,438,490
+UA2FZ	1,433,295
+LY4A	1,367,380
+YL2SM +LY7M	1,314,036
+L1/IVI	1,313,020
ASSISTED W	/VE
+VA2WA +W1UE	1,191,360
+W1UE	1,044,669
+K1A	1,010,152
+AA1K +K3WW	979,104
+K3WW +K1LT	807 380
+N3HEE	784.655
+VE3RZ	771,948
+K2AV	709,800
+KVØQ	
	093,320
SSB	093,320
SSB	093,320
<mark>SSB</mark> USA	
SSB USA	338,548
<b>SSB</b> USA K1LZ	338,548 302,736
<b>SSB</b> USA K1LZ	338,548 302,736 213,891
<b>SSB</b> USA K1LZ K3ZM ND8DX NA8V W3BGN	338,548 302,736 213,891 199,827 183,440
<b>SSB</b> USA K1LZ K3ZM NDBDX NA8V W3BGN W1XX	338,548 302,736 213,891 199,827 183,440 181,645
SSB USA K1LZ K3ZM ND8DX NA8V	338,548 302,736 213,891 199,827 183,440 181,645 160,290
SSB USA K1LZ	338,548 302,736 213,891 199,827 183,440 181,645 160,290 114,595
SSB USA K1LZ K3ZM ND8DX NA8V W3BGN W1XX K2XA W3TS W10C	338,548 213,891 199,827 183,440 181,645 164,290 114,595 112,995
SSB USA K1LZ K3ZM ND8DX NA8V W3BGN W1XX K2XA W3TS W10C	338,548 213,891 199,827 183,440 181,645 164,290 114,595 112,995
SSB USA K1LZ	338,548 213,891 99,827 183,440 181,645 160,290 114,595 112,995 109,340
SSB USA K1LZ	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461
SSB USA K1LZ K3ZM ND8DX NA8V W3BGN W1XX K3ZA W1XX K3ZA W1XX K3ZO VE VY2ZM VE VY2ZM	338,548 302,736 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190
SSB USA K1LZ	338,548 302,736 213,891 199,827 183,440 181,645 160,290 114,595 112,995 109,340 745,461 205,190 203,112
SSB USA K1LZ	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 205,190 205,190 205,191 205,190
SSB USA K1LZ K3ZM ND8DX NA8V W3BGN W1XX K2XA W3TS W1XX K2XA W3TS W1XX V3TS W3TS W3TS W3TS W3TS W3TS W3TS W3TS W	338,548 302,736 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 203,112 140,882 117,355 
SSB USA K1LZ	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 203,112 140,882 117,355 
SSB USA K1LZ	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 203,112 140,882 117,355 
SSB USA K1LZ	338,548 213,891 199,827 183,440 181,645 164,290 114,595 109,340 745,461 205,190 205,190 205,190 205,190 203,112 140,882 117,355 
SSB           USA           K1LZ           K3ZM           ND8DX           NA8V           W3BGN           W1XX           K2XA           W1XS           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3MGY           VE3MGY           VA3AR           VA3AR           VA3AR           VA3AR           VE3VY           VE3TW	338,548 213,891 199,827 183,440 181,645 164,290 114,595 109,340 745,461 205,190 205,190 205,190 205,190 203,112 140,882 117,355 
SSB USA K1LZ	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 203,112 140,882 117,355 99,603 38,581 29,930 19,807 14,790
SSB           USA           K1LZ           K3ZM           ND8DX           ND8DX           W3BGN           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3DZ           VA3AR           VE3VY           VE3TW           Zone 3	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 203,112 140,882 117,355 99,603 38,581 29,930 14,790 
SSB           USA           K1LZ           K3ZM           K3ZM           W3BGN           W3BGN           W1XX           W3BGN           W3TS           W1XX           K3ZO           W3TS           W10C           K3ZO           VE           VY2ZM           VE3PN           VE3MGY           VE3AG           VA3AR           VA3AR	338,548 302,736 213,891 199,827 183,440 181,645 1645 1645 114,595 109,340 745,461 205,190 203,112 140,882 117,355 99,603 38,581 29,930 14,790 23,970 18,179
SSB           USA           K1LZ           K3ZM           ND8DX           NA8V           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3PN           VE3MGY           VE3TW           Zone 3           N7AU           N7AL           N7AL	338,548 302,736 213,891 199,827 183,440 181,645 160,290 114,595 112,995 109,340 745,461 205,190 203,112 40,882 117,355 99,603 38,581 29,930 14,790 23,970 14,790
SSB           USA           K1LZ           K3ZM           ND8DX           ND8DX           W3BGN           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           V2ZM           VE3DZ           VA3AR           VA3AR  <	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 203,112 140,882 117,355 99,603 38,581 29,930 14,790 
SSB           USA           K1LZ           K3ZM           K3ZM           ND8DX           NA8V           W3BGN           W1XX           K2XA           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3PN           VE3DZ           VA3AR           VA3AR	338,548 213,891 199,827 199,827 183,440 181,645 160,290 114,595 112,995 109,340 745,461 205,190 203,112 40,882 117,355 99,603 38,581 29,930 19,807 14,790 
SSB           USA           K1LZ           K3ZM           ND8DX           ND8DX           W3BGN           W1XX           K2XA           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3DPN           VF3DZ           VA3AR           VA3NW           VE3VY           VE3TW           Zone 3           N7AU           N7RK           W6AFA           K7IU           W7ZB           VA7EU           AI6L Y	338,548 302,736 213,891 199,827 183,440 181,645 160,290 114,595 109,340 
SSB           USA           K1LZ           K3ZM           ND8DX           ND8DX           W3BGN           W3BGN           W1XX           K2XA           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3DZ           V43AR           V43NW           VE3VY           VE3VY           VE3VY           VE3VY           VE3TW           Zone 3           N7AU           N7RK           W6AFA           K7IU           W7ZB           VA7EU           A16LY           K7HP	338,548 338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 203,112 140,882 17,355 99,603 38,581 29,930 19,807 14,790 23,970 18,179 23,970 18,179 23,970 18,179 23,970 18,179 23,970 14,250 
SSB           USA           K1LZ           K3ZM           ND8DX           ND8DX           W3BGN           W3BGN           W1XX           K2XA           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3DZ           VA3AR           VA3AR	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 203,112 140,882 117,355 99,603 38,581 29,930 19,807 14,790 23,970 18,179 23,970 18,179 23,970 18,179 14,250 10,560 7,887 7,056 6,975 5,478 4,524
SSB           USA           K1LZ           K3ZM           K3ZM           ND8DX           NA8V           W3BGN           W1XX           K2XA           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3PN           VE3DZ           VA3AR           VA3AR	338,548 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 203,112 140,882 117,355 99,603 38,581 29,930 19,807 14,790 23,970 18,179 23,970 18,179 23,970 18,179 14,250 10,560 7,887 7,056 6,975 5,478 4,524
SSB           USA           K1LZ           K3ZM           ND8DX           ND8DX           W3BGN           W1XX           K2XA           W3BGN           W1XX           K2XA           W3TS           W10C           K3ZO           VE           VY2ZM           VE3DPN           VF3DZ           VA3AR           VA3NW           VE3VY           VE3TW           Zone 3           N7AU           N7RK           W6AFA           K7IU           W7ZB           VA7EU           AI6L Y	338,548 302,736 213,891 199,827 183,440 181,645 160,290 114,595 109,340 745,461 205,190 203,112 140,882 17,355 99,603 38,581 29,930 19,807 14,790 23,970 18,179 23,970 18,179 23,970 18,179 23,970 18,179 23,970 14,250 

VE3PN.....

.205,190

VERMOV		SP5CJY	103 831
		VA3AC	
	140,882	W8C0	
VA3AR	117,355	0K1LRD	84,832
KØIDX	105,690	LY9A	
		SQ9ZAX	
		HA8WY	
KØTT		OM5WW	60,952
	QRP	LOW POWER	W/VE
E77Y	61,440	VE3MGY	203,112
		VA3AC	
		W8C0	
	23,698	KB40LM	
	22,320	N2HMM	51,747
DLØAZ	21,276	W8GP	51 012
	20,628	N4XL	
		NGØC	
UKILL		VA3NW	
HA111	14,924	KS3D	
	DX	QRP W/	/E
	623,370	K3TW	5,208
ZF2AM		N8LJ	
		K2MIJ	
		W7BAK	, -
		WB8DC	
		W1RGA	676
YL7X	223,040	WØYJT	
	204,544	VE6EX	
		W1IG	
LIJW	133,003	VA3MYC	
	Zone 14		
		MULTI-OPERATO	
		PJ4G	538,164
	64,920	0L7M	
DF2DJ	64,100	EW5A	
DI 2SAX			
		HG8DX	
		US1Q	358,179
		SP8R	352,577
	51,696	UA7K	317 900
DLØESA		N2CEI	
		NZUEL	
DK1KC	45 360	NICOW	
	45,360 45,150	N2CW	
	45,360 45,150	N2CW S56P	
DG5MLA		S56P	273,428
DG5MLA	45,150 <b>Zone 15</b>	S56P	273,428 OR W/VE
DG5MLA S57C	45,150 <b>Zone 15</b> 371,853	S56P MULTI-OPERAT N2CEI	OR W/VE 311,115
DG5MLA S57C IK2YCW	45,150 Zone 15 	S56P MULTI-OPERAT N2CEI N2CW	OR W/VE 311,115 306,976
DG5MLA S57C IK2YCW ES5RW	45,150 Zone 15 	S56P MULTI-OPERAT N2CEI	OR W/VE 311,115 306,976
DG5MLA S57C IK2YCW ES5RW SN7D		S56P MULTI-OPERAT N2CEI N2CW WU2X	273,428 OR W/VE 311,115 306,976 267,145
DG5MLA S57C IK2YCW ES5RW SN7D	45,150 Zone 15 	S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX	<b>OR W/VE</b> 311,115 306,976 267,145 169,338
DG5MLA S57C IK2YCW ES5RW SN7D YL7X	45,150 Zone 15 	S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W8PR	OR W/VE 311,115 306,976 267,145 169,338 154,356
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N		S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W8PR K2AX	OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL	45,150 Zone 15 	S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W8PR N3DPB	OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W	45,150 Zone 15 	S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W5MX W5MX N5MP N3DPB WR50	0R W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY2BVB		S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W8PR N3DPB	0R W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY2BVB	45,150 Zone 15 	S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W5MX W5MX N5MP N3DPB WR50	OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY2BVB SN6M		S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W5MX W8PR K2AX N3DPB WR50 NE3F	OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY2BVB SN6M		S56P MULTI-OPERAT N2CEI	OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY2BVB SN6M UX1UA		S56P MULTI-OPERAT N2CEI	OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N S07CL LY5W LY2BVB SN6M UX1UA US5D		S56P MULTI-OPERAT N2CEI	OR W/VE 273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642 66,300 ORLD 650,743
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N S07CL LY5W LY2BVB SN6M UX1UA US5D		S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W5MX W5MX W5MX W5MX N2FR K2AX N3DPB W750 NE3F K3CCR ASSISTED W +0K7K +LY4A	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY2BVB SN6M UX1UA UX1UA US5D UT2AA		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY2BVB SN6M UX1UA UX1UA US5D UT2AA		S56P	OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY2BVB SN6M UX1UA UX1UA UX1UA US5D UT2AA R&WF R&WF RA3XM		S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W5F K2AX N3DPB  W750 NE3F  HCX +OK7K +LY4A +S54ZZ +LX2ØI	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642 66,300 ORLD 650,743 610,416 479,412 302,808 286,556
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY2BVB SN6M UX1UA US5D UX1UA US5D UX1UA R8WF R3XM UA4LCH		S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W5F K2AX N3DPB  W750 NE3F  HCX +OK7K +LY4A +S54ZZ +LX2ØI	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642 66,300 ORLD 650,743 610,416 479,412 302,808 286,556
DG5MLA S57C IK2YCW ES5RW SN7D YL7X YL7X SP9N SN7CL LY5W LY5W LY2BVB SN6M UX1UA US5D UX1UA US5D UT2AA R8WF RA3XM UA4LCH UA5TM		S56P	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642 66,300 ORLD 650,743 610,416 479,412 302,808 286,556 270,776
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SO7CL LY5W LY5W LY2BVB SN6M UX1UA US5D UT2AA R&WF RA3XM UA4LCH UA5TM		S56P	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642 66,300 ORLD 650,743 610,416 479,412 302,808 286,556 280,526 280,526 270,776 267,064
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP9N SP5D UX1UA US5D UT2AA R8WF RA3XM UA4LCH RA3XM UR5TM RA1ZZ		S56P	273,428 OR W/VE .311,115 306,976 .267,145 .169,338 .154,356 .100,809 .85,413 .79,168 66,642 66,642 66,300 ORLD 650,743 610,416 479,412 302,808 286,556 267,064 267,064 262,352
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY2BVB SN6M UX1UA		S56P MULTI-OPERAT N2CEI N2CW WU2X W5MX W5SO NE3F K3CCR ASSISTED W +OK7K +LY4A +K54ZZ +LX2ØI +EA9/DL1MGB +DK6WL +DK6WL +DK2OY	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY2BVB SN6M UX1UA		S56P	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY2BVB SN6M UX1UA		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D SN7D SQ7CL LY5W LY5W LY5W LY2BVB SN6M UX1UA UX1UA US5D UX1UA US5D UT2AA R&WF R&WF RAJZZ RAJZZ RA1ZZ RA1ZZ RA1ZZ RA1ZZ RA1ZZ RA1ZZ RA1ZZ		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W SN6M UX1UA US5D UX1UA US5D UT2AA R8WF R8WF		S56P	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642 66,300 ORLD 650,743 610,416 479,412 302,808 288 288,556 270,776 267,064 262,352 233,064 194,292 M/VE 194,292
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W SN6M UX1UA US5D UX1UA UX1UA US5D UX1UA		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D SN6M .		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D SN7D SP9N SQ7CL LY5W LY5W LY5W LY5W LY2BVB SN6M UX1UA US5D UX1UA UA4LCH RA3XM CA3XM		S56P	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 79,168 66,642 66,300 ORLD 650,743 610,416 479,412 302,808 286,556 270,776 267,064 262,352 233,064 194,292 194,292 194,292 194,292 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W LY2BVB SN6M UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA R&WF RA3XM UA4LCH RSWF RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W LY2BVB SN6M UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA R&WF RA3XM UA4LCH RSWF RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH		S56P	273,428 OR W/VE 311,115 306,976 267,145 169,338 154,356 100,809 85,413 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W SN6M UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UZ1U Ray RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RC5Z UA9CAW		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SO7CL LY5W LY2BVB SN6M UX1UA US5D UZ5D UZ5D UT2AA R3XM UA4LCH R43XM UA4LCH R65Z UZ1U R8WF R43XM UA4LCH R43XM UA4LCH R43XM UA4LCH R43XM UA4LCH R43XM UA4LCH R43XM UA4LCH R43XM UA4LCH R43XM UA4LCH R43XM UA4LCH R5Z UA4LCH R5Z UA4LCH R5Z UA4LCH R5Z UA4LCH R43XM R43XM UA4LCH R43XM R4		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W LY2BVB SN6M UX1UA US5D UX1UA UASTM RA3XM UA4LCH RA3XM UA4LCH RA1ZZ RC5Z UA9CAW RA1ZZ RC5Z UA9CAW RA1ZZ RC5Z UA9CAW RA1ZZ RC5Z UA9CAW RA3ZM UA4LCH RA1ZZ RC5Z UA9CAW RA3ZM UA4LCH RA1ZZ RC5Z UA9CAW RXSE RC2SB		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W LY5W SN6M UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UZ1U R&WF RA3XM UA4LCH RA1ZZ RC5Z UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM RA		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W LY5W SN6M UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UZ1U R&WF RA3XM UA4LCH RA1ZZ RC5Z UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM UA4LCH RA3XM RA		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D SN7D SP9N SQ7CL LY5W LY5W LY5W LY2BVB SN6M UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA UX1UX		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W LY2BVB SN6M UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA UX1UA US5D UX1UA US5D UX1UA US5D UX1UA US5D UX1UA UX1UA UX1UA US5D UX1UA UX1UX		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W SN6M		S56P	273,428 OR W/VE 
DG5MLA S57C IK2YCW ES5RW SN7D YL7X SP9N SQ7CL LY5W LY5W LY5W SN6M		S56P	273,428 OR W/VE 

.444,136

.409,590

GM3POI .....

DL5SE ..

pared to the High-Power Assisted category where 25 scores topped 1M. Again, the standout score is from another German: Mathias, DL4MM, operating from P4ØAA. Mat's score is the only one above 2M points on that list. The next 24 stations above 1M are mostly from Europe, with VA2WA, W1UE, and K1A all sneaking into the millionaire's club.

In the hugely popular Multi-Op category, there were a whopping 49 scores over 1M points, and eight over 2M! There were six 1M-plus scores in the Czech Republic alone. The crew at OK7K took the top EU spot with 2.15M points and EW5A at 2.04M points. OK7K has 11 receiving antennas and managed over 500 U.S.A. QSOs. A surprise entrant into the CQ160 was the K3LR super station. They made a fantastic effort of over 1M points, but the seasoned N.J. shore crew at W2GD was victorious in the end.

Of special note is VO2AC who have tried to operate from a shore lighthouse QTH for the past 3 years. The weather finally cooperated, and their effort is the third highest Multi-

### **2020 CQWW 160M CONTEST CLUB SCORES** (Minimum of 3 three entries required for listing)

(minimum of 3 three entries required for insting)					
SCORE	#ENTRIES	CLUB	SCORE	#ENTRIES	CLUB
40,734,353	214	BAVARIAN CONTEST CLUB	472,061	3	OK1KMU
22,814,744	170	POTOMAC VALLEY RADIO CLUB	468,511	4	CZECH CONTEST CLUB
19,076,095	131	FRANKFORD RADIO CLUB	466,080	3	UR-QRP-CLUB
12,335,632	52	RUSSIAN CONTEST CLUB	460,051	5	BRISTOL (TN/VA) ARC
11,453,408	64	RHEIN RUHR DX ASSOCIATION	452,719	4	LA-DX-GROUP
11,367,691	101	UKRAINIAN CONTEST CLUB	393,793	13	DFW CONTEST GROUP
10,587,525	83	YANKEE CLIPPER CONTEST CLUB	393,310	15	WESTERN WASHINGTON DX CLUB
9,877,921	54	CONTEST CLUB ONTARIO	392,752	5	BIG SKY CONTESTERS
8,423,716	21	CROATIAN CONTEST CLUB	352,420	4	NORTH CAROLINA DX AND CONTEST CLUB
8,110,266	20	BALTIC CONTEST CLUB	321,823	6	CATALONIA CONTEST CLUB
7,054,444	42	KAUNAS UNIVERSITY OF TECHNOLOGY RADIO	318,910	4	R4F-DX-G
		CLUB	307,256	9	ROCHESTER DX ASSOCIATION
6,910,185	89	SOCIETY OF MIDWEST CONTESTERS	298,798	3	OK1KQJ CONTEST CLUB
6,598,828	15	BELOKRANJEC CONTEST CLUB	293,646	5	NOT QUITE WORKABLE CONTEST CLUB
6,012,255	19	SLOVENIA CONTEST CLUB	292,097	3	RADIO AMATEURS OF NORTHERN VERMONT
5,745,296	19	MAD RIVER RADIO CLUB	252,542	9	ORCA DX AND CONTEST CLUB
5,475,575	47	ARIZONA OUTLAWS CONTEST CLUB	231,004	4	YO DX CLUB
5,166,850	42	SP DX CLUB	230,638	3	SRR
5,070,981	20	CONTEST CLUB FINLAND	224,827	4	DONBASS CONTEST CLUB
4,816,285	24	EA CONTEST CLUB	218,505	6	MOTHER LODE DX & CONTEST CLUB
4,467,047	15	LATVIAN CONTEST CLUB	213,286	3	LOMA DEL TORO DX CLUB
4,461,210	15	HUNGARIAN DX CLUB	200,526	9	SWAMP FOX CONTEST GROUP
3,834,226	25	ITALIAN CONTEST CLUB	199,182	5	CSM Craiova
3,824,308	13	URAL CONTEST GROUP	190,461	4	BLACK SEA CONTEST CLUB
3,779,536	13	BELARUS CONTEST CLUB	185,580	5	ARAUCARIA DX GROUP
3,733,725	16	CONTEST CLUB SERBIA	179,537	3	IRKUTSK RADIO CLUB
3,369,738	11		174,315	8	VRHNIKA CONTESTERS
3,332,506	28	FLORIDA CONTEST GROUP	167,290	6	TEXAS DX SOCIETY
2,684,913	18	DANISH DX GROUP	146,168	7	WEST PARK RADIOPS
2,678,443	18 7	NORTH COAST CONTESTERS	129,827 120,288	4	NORTH TEXAS CONTEST CLUB
2,653,497 2,630,001	12	WORLD WIDE YOUNG CONTESTERS VYTAUTAS MAGNUS UNIVERSITY RADIO CLUB	120,200	3 3	GERMAN DX FOUNDATION GREAT SOUTHERN DX ASSOCIATION
2,534,313	57	DEUTSCH AMATEUR RADIO CLUB	112,907	3	SPANDAU DXERS
2,438,712	12	SOUTH URAL CONTEST CLUB	112,886	7	RU-QRP
2,334,034	9	THRACIAN ROSE CLUB	110,247	3	HILLTOP TRANSMITTING ASSOCIATION
2,167,420	28	TENNESSEE CONTEST GROUP	109,726	3	RCWC
2,044,593	42	MINNESOTA WIRELESS ASSN	108,320	4	BERGEN AMATEUR RADIOASSOCIATION
1,999,619	12	SOUTH EAST CONTEST CLUB	107,702	5	PORTAGE COUNTY AMATEUR RADIO SERVICE
1,985,101	18	KENTUCKY CONTEST GROUP	106,831	4	599 DX ASSOCIATION
1,965,301	8	MARITIME CONTEST CLUB	101,343	4	CENTRAL VIRGINIA CONTEST CLUB
1,883,714	10	ALRS ST PETERSBURG	94,760	6	ARKTIKA
1,880,204	12	RUSSIAN CW CLUB	86,209	3	VORONEZH RADIO CLUB
1,761,851	15	ALABAMA CONTEST GROUP	83,271	4	GRANITE STATE ARA
1,725,190	9	VERON	77,028	3	SHENANDOAH VALLEY WIRELESS ASSOCIATION
1,624,395	12	GRAND MESA CONTESTERS OF COLORADO	72,468	4	METRO DX CLUB
1,596,003	3	CENTRAL SIBERIA DX CLUB	65,804	8	SPOKANE DX ASSOCIATION
1,573,302	7	GIPANIS CONTEST GROUP	63,958	3	SK5AA VASTERAS RADIOKLUBB
1,533,470	3	MILARA CONTEST CLUB	56,700	3	KRIVBASS
1,502,911	3	FLORIDA WEAK SIGNAL GROUP	56,554	3	WOBBLERS
1,362,726	3	CLIPPERTON DX CLUB	56,469	3	BADGER CONTESTERS
1,294,469	10	CONTEST GROUP DU QUEBEC	55,229	3	RADIO AMATEUR ASSOCIATION OF WESTERN
1,290,695	11	CENTRAL TEXAS DX AND CONTEST CLUB	54.040	0	
1,114,978	21	SOUTHERN CALIFORNIA CONTEST CLUB	54,949	3	SOUTHWEST OHIO DX ASSOCIATION
1,113,114	31	NORTHERN CALIFORNIA CONTEST CLUB	46,474	8	
1,040,998	7		43,458	3	
1,030,536	18	HUDSON VALLEY CONTESTERS AND DXERS	41,682	3 9	THE VILLAGES AMATEUR RADIO CLUB
1,022,859	4	RIIHIMAEN KOLMOSET TALL TREES CONTEST GROUP	35,876		KEYMEN'S CLUB OF JAPAN
1,017,550	5 4	SHAKHAN CONTEST CLUB	33,868	3 3	ARCK NORFOLK AMATEUR RADIO CLUB
986,935 888,926	5	LU CONTEST GROUP	27,017 22,026	4	TURKISH RADIO AMATEUR CLUB
870,654	3	FAZENDA ACTIVITY CONTEST GROUP	21,292	4	URE BAIX CAMP
843,335	10	KANSAS CITY CONTEST CLUB	20,675	3	BLRCI
829,413	10	NIAGARA FRONTIER RADIOSPORT	8,068	3	CALABRIA DX TEAM
755,679	13	WILLAMETTE VALLEY DX CLUB	6,448	3	PACIFIC NORTHWEST VHF SOCEITY
708,069	5	IOWA DX AND CONTEST CLUB	2,171	16	YB LAND DX CLUB
654,916	3	VERULAM ARC	438	9	ORARI LOKAL KEDIRI
641,475	7	DEEP DIXIE CONTEST CLUB	168	7	ORARI LOKAL BOGOR
628,238	7	CAROLINA DX ASSOCIATION	158	9	SINGLE FIGHTER DX GROUP
620,394	6	CHILTERN DX CLUB	114	4	ORARI LOKAL BLITAR
611,299	4	RIO DX GROUP	76	3	CDR GROUP
604,156	3	OMSK REGION RADIOCLUB	45	4	CABREUVADX
591,604	8	CTRI CONTEST GROUP			

Op in North American history. Congratulations to VE9CB and VO1HP, along with Chris, VO2AC, for their great dedication to the contest.

Conditions were good enough this year to produce some big scores in the QRP section. World winner Arunas, LY5E, commented that the new rules allowing assisted operation for all QRP entries was a welcome change. He made an incredible 990 QSOs, breaking the K9AY record of 801 QSOs dating back to 2009. Marty, N9SE, had the highest QRP score in the U.S. with 714 QSOs. Well done, guys!

### **SSB Results**

There were 1,471 logs submitted for SSB this year, up from 1223 in 2019. The transatlantic conditions on SSB were nowhere near as good as the CW portion.

The Multi-Op team at OL7M fought bad weather and bad propagation to North America and almost won the world. They almost doubled the winning total of QSOs from PJ4G, but the lack of 10 pointers and states for OL7M made the scoring difference. The margin of victory was on only 5K points.

In the U.S.A., the shore station of N2CW (the same location as W2GD on CW) was surprised by the Northern Florida team of N2CEI (who operates as KØDI on CW). N2CW had a slightly higher claimed score, but the positions changed after log checking. It is very unusual to win this category from south-

eastern part of the country. Congratulations, guys!

Jeff, VY2ZM, decided to return to the superstation on Prince Edward Island to operate SSB, and pilot it to the top World score in Single-Op High Power. He managed to squeak by the Cayman Island tag team of ZF5T and ZF2AM.

With depressed conditions, the U.S. competition was a bit tougher. But once again it was K3JO at K1LZ and K3ZM battling for the top spot. It was Velamir operating remotely from the new Maine superstation of K1LZ who was victorious again. The amazing unpredictabil-

ity of Topband means that in any given year the places can change. This was "Maine's year" for sure.

And in Europe, only 35K points separated Branko, S57C, operating from S5ØC, and Gabry, IT9RGY, operating from the fine station of IK2YCW. Operating this contest from Europe is always a challenge due to the enormous QRM from the big guns. Congratulations to all the participants for sticking it out to the end.

In the Single-Op Low Power category, our friend Brian, VE3MGY, blew away the competition with a score of



David, HC5DX, made some people happy on SSB with a fine multiplier from his mountaintop QTH at 8,300 feet in elevation in Ecuador.



Multi-Op Asia winner is the crew from Ukraine and Turkey of (not listed in standing order) TA3A, TA3AER, TA3EL, TA3LHH, UA9CDC, URØMC, US2YW, UT5ECZ, UT5EL, UW8SM, and UZ5DX.

# BUDDIPOLE



#### Secure online ordering at: www.buddipole.com

#### BUDDIPOLE FEATURES

- Multi-band design works 9 bands (40 meters thru 2 meters) with one set of adjustable coils!
- Rated from QRP to 250 watts PEP
- Modular Design create dozens of different antennas with interchangeable parts
- Rotatable/Directional
- Lightweight, rugged components
- Rotating Arm Kit allows users to instantly change antenna configurations
- Used by Emergency Services Groups throughout the world

### MINI BUDDIPOLE<sup>™</sup>



Same quality and performance as the standard Buddipole in a more compact package which easily fits inside a daypack or small suitcase.

See our videos www.youtube.com/buddipole

info@buddipole.com

tel: (503) 591 8001 fax: (503) 214 6802

203K; the next station was LY4L at 131K. George, W8CO, repeated his 2019 U.S.A. Low-Power victory as well. In Europe, only two stations were able to crack 100K points: LY4L and SP5CJY.

In the wildly popular Assisted category, Petr, OK1BN, operating as OK7K, piloted the station to first place in the world. Coming in second was Rolandas, LY4A, with only 40K fewer points than Petr. The U.S. battle in Assisted resulted in Bud, W3LL, outlasting Rich, NN3W, operating at N4RV, by only 30K points. In the new Low-Power Assisted category, Glenn, K2FF, operating at NA5NN, took top U.S. honors. His only comment was "CQ Wyoming, CQ Wyoming ... where are you?" He just edged out N4BAA by only 2K points.

And Slavko, S57DX, who took top Low-Power World Assisted, makes this comment: "As expected LP is hard work!" Imagine if he tried QRP?

Speaking of QRP, somehow Max, E77Y, managed to make 302 QSOs with under 5 watts. This was a fantastic job given the conditions. Next was Bela, HA8BE, a long-time 160M regular, with 250 QSOs. Operating QRP on 160-meter SSB has to be one of the hardest things to do in a contest. Congratulations to all who stuck it out. Unfortunately there was no trophy sponsored for top USA QRP, but congratulations to Gene, WB4MSG, on taking first place!

The CQ160 Committee would like to take a moment to honor long time Topband enthusiast Herb Schoenbohm, KV4FZ. Herb became a Silent Key (SK) in April 2020 at age 84. He was a fixture on 160 meters and in most 160-meter contests as well. RIP Herbie, we will all miss you.

## **Obeying the Rules**

This year it was necessary to disqualify one station (US1Q on CW). We have proof that a remote receiver located on

another continent was used to receive stations. This is a clear violation of the rules and spirit of the contest. While not all violations are as blatant as this, the committee receives many complaints from entrants every year. We wish to point out these violations in the hopes we can keep a level playing field in the future.

• Use of remote receivers outside 100 kilometers (inside 100 kilometers allowed in Multi-Op only)

• Use of excessive power

• Use of QSO finding assistance by Single-Op who claims Unassisted

• Excessively wide signals, including key clicks and splatter.

• Operating outside band limits (below 1810 in IARU Region 1, and using band edges)

• Unsportsmanlike conduct (such as frequency fights).

In closing, I would like to give special thanks to all those assisting me in making the contest a success, including: N6TR (log checking), K1DG (trophies), and K5ZD (webmaster).

Certificates for everyone are available for printing on our website at CQ160.com. If anyone would like a Log Checking Report, send an email to me at <director@CQ160.com>. Please specify which mode you are asking for and the call-sign used.

Trophies will be mailed shortly. Thanks to all for participating and see you in 2021. Remember all CQ Contests have a 5-day deadline for submitting logs. Check out the rules on CQ160.com for the latest information.

– 73, Andy, N2NT, Director CQ160 Contest

(Scores on page 102)