

# Results: 2019 CQWW 160-Meter Contest

## Topband During the Extended Solar Minimum Years

BY ANDY BLANK\*, N2NT



The team at VO2AC, which placed #9 in the Multi-Op World category, included (from l. to r.) VE9CB, VO2AC, and VO1HP.

**A** pattern has been emerging over the past few years. The 160-meter band is a great DX band during the solar minimum.

It seems the CW portion of the contest is capable of producing some large scores; however, the conditions on SSB in March have been sketchy at best, but with some good sunrise peaks.

While not approaching the golden year of 2009, when the band sounded like 20 meters, 2019 CW produced 29 scores over 1 million points.

The highest score of the contest was made by Dimitri, RA3CO, from CN2CO at 2.477 Meg, just edging out Jozef, OM3GI, operating from CT9ABO. The point advantage from Africa is quite evident here, but it takes some dedication to travel and set up during the winter to operate this contest.

Nowhere is that more evident than with the team from TKØC. Using a temporary 16-meter Spiderbeam Inverted 'L' with around 40 radials, and some assorted receiving antennas, the team from Slovenia won the World Multi Operator trophy. Great job by Goran, S55OO, and his fine team "Charlie."

On SSB, Max, IZ4DPV, traveled to the PJ4G contest station on Bonaire. He and station owner Noah, K2NG, operated the top Multi-op in the world at just under 600K points.

The only other stations able to break 600K on SSB were from Europe in the highly competitive Single-Op Assisted

category. Rolandas, LY4A, had the highest score in the entire contest at 620K, with Petr, OK1BN, operating OK7K to 611K.

Many thanks again to the Bavarian Contest Club, which had 195 entries in the CQ 160 Contest. Their 28 Meg total is just below the 2018 29 Meg total, providing the main chunk of activity in Europe for the contest. As usual, the PVRC, YCCC, and FRC provided many entries from the U.S. and Contest Club Ontario is the big driver from Canada.

Congratulations to all the clubs for keeping up the activity, and thanks for the support.

### CW Results

A record 2,740 logs were received for CW. Single-Op assisted and unassisted entries were about equal. Next year we will make the long overdue change to include a low-power Assisted entry as well.

The Millionaires club was well represented this year. Here is a list of all scores over 1 Meg.

CN2CO	.....2,477,250	VE3EJ	.....1,128,660
OM7M	.....1,210,560	4X2M	.....1,250,200
CT9ABO	.....2,452,908	E7DX	.....1,122,203
OK7K	.....1,189,800	ED8W	.....1,230,576
TKØC	.....1,840,484	EIØR	.....1,098,976
UA7K	.....1,164,114	NP2J	.....1,076,619
PJ2T	.....1,701,310	TM6M	.....1,065,875
HG8DX	.....1,157,698	RL3A	.....1,051,762
D4C	.....1,663,360	OK5Z	.....1,045,972
HB9CA	.....1,143,480	DM6V	.....1,041,228
P33W	.....1,551,716	DL6FBL	.....1,030,710
VO2AC	.....1,141,504	EF5Y	.....1,011,840
P4ØAA	.....1,502,439	SN7Q	.....1,010,850
LX7I	.....1,133,713	S5ØW	.....1,010,275
C6AGU	.....1,458,858		

Last year's Single-op winner, Kevin, N5DX, decided to try the highly competitive Multi-Op category this year. He was joined by his dad, K5GO; K5RM, and KM5G, operating remotely at the QTH of N2QV in New York from Arkansas. They surprised the perennial Multi-Op superstars from W2GD, and topped the field. KM3T, operating from KC1XX, reported that conditions were disturbed in the northeast the first evening. However, a great result was posted by the team at KØDI in Florida, making third place in the U.S. The VO2AC team was able to break 1 Meg for ninth place in the world as well.

North America was well represented by PJ2T, which has been operated by K8ND and W8WTS for many years, and C6AGU by AA7JV and N6MZ, who went to the warmer climates for great multi-op scores.

No 160 contest is complete without the stories from the "Briggs Brothers." The combined CW/SSB winner and Single-op U.S. winner on both modes was Peter, K3ZM. Peter reported great U.S. west coast conditions the first night.

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## TROPHY WINNERS AND DONORS

**World Single Operator Combined SSB/CW**  
**Peter H Briggs, K3ZM**  
**Donor:** Ed Parish, K1EP

**World Multioperator Combined SSB/CW**  
**Andy Kazantsev, UA7K**  
**(R3FA RK7A RW7K UB7K R6KVA ops)**  
**Donor:** Juan Carlos Munoz, TG9AJR

**CW**  
**SINGLE OPERATOR**  
**World**  
**Dimitri Kryukov, CN2CO**  
**Donor:** Bill Tippett, W4ZV- DJ8WL Memorial

**U.S.A.**  
**Peter H Briggs, K3ZM**  
**Donor:** Milt Jensen, N5IA, Memorial by Arizona  
 Outlaws Contest Club

**Canada**  
**Vladimir Milutinovic, VE3JM**  
**Donor:** VE2XAA Memorial by Thor Stefansson,  
 TF4M

**U.S.A. - Zone 3**  
**Niko Cimbur, AC6DD**  
**Donor:** Bruce Butler - W6OSP Memorial

**U.S.A. - Zone 4**  
**Victor A. Kean, Jr., K1LT**  
**Donor:** Steve Schmidt, K4WA

**U.S.A. - Zone 5**  
**Velimir Deric (K3JO), K1LZ**  
**Donor:** Paul H. Newberry, Jr., N4PN

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

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

**Europe**  
**Olivier Seizelet (F1AKK), TM6M**  
**Donor:** Emir-Braco Memic, E77DX

**South America**  
**Mathias Kolpe (DL4MM), P40AA**  
**Donor:** John Rodgers, WE3C

**Oceania**  
**Bill Kollenbaum, KH7B**  
**Donor:** Will Angenent, K6ND

**European Russia**  
**Igor Avdeev, UA2FZ**  
**Donor:** UA2 Contest Club

**Asiatic Russia**  
**Alexey Bogomolov, RL9Y**  
**Donor:** UA2 Contest Club

**Japan**  
**Masaki Okano, JH4UYB**  
**Donor:** Alabama Contest Group

**North America**  
**Daniel Flaig (K8RF), NP2J**  
**Donor:** CQ magazine - N4IN Memorial

**Southern Hemisphere**  
**Tony Vieira, OA4DX**  
**Donor:** Robert Kile, W7RH

**World Assisted**  
**Jozef Lang (OM3GI), CT9ABO**  
**Donor:** Andy Chesnokov, UA3AB

**Europe Assisted**  
**Lubo Martiska (OM5ZW), OM7M**  
**Donor:** DX-Hotel DM9EE

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

**U.S.A. Assisted - Zone 3**  
**Riki Kline, K7NJ**  
**Donor:** Larry Pace, N7DD

**U.S.A. Assisted - Zone 4**  
**Jerry Rosalius, WB9Z**  
**Donor:** Pete Michaelis, N8TR

**Assisted - Zone 5**  
**Curtis W. Rose, N2ZX**  
**Donor:** Potomac Valley Radio Club

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

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

**Asia - Low Power**  
**Mamuka Kordzakhia, 4L2M**  
**Donor:** Robert Kile, W7RH

**Europe Low Power**  
**Emir Tubic, E74O**  
**Donor:** Petr Ourednik, OK1RP - DL1RK Memorial

**Canada Low Power**  
**Ron Schwartz, VE3VN**  
**Donor:** Contest Club Ontario

**World QRP**  
**Peter Voelpel, DJ7WW**  
**Donor:** Wayne Mills, N7NG

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

**U.S.A. QRP - Zone 4**  
**Gregory Poel, W8GP**  
**Donor:** K9JWV Memorial by Dale Putnam, WC7S

**Europe QRP**  
**Milan Stejskal (OK1IF), OL4W**  
**Donor:** Peter Voelpel, DJ7WW

**MULTI-OPERATOR**  
**World**  
**Goran Andric (S55OO), TK0C**  
**(S53F, S53RM, S55OO, S57AL, S57C, S57NAW ops)**  
**Donor:** Hugh Valentine, N4RJ

**U.S.A.**  
**Kevin Stockton, N5DX**  
**(K5RM, K5GO, KM5G, N5DX ops)**  
**Donor:** W0CD Memorial - K8GG W8UVZ

**Europe**  
**Petr Clupny, OK7K**  
**(OK1BN, OK1DWP, OK1GK, OK1NS ops)**  
**Donor:** Bob Evans, K5WA

**ZONE 16**  
**Vladimir Aksenov, UA7K**  
**(R3FA, RK7A, RW7K, UB7K ops)**  
**Donor:** Vladimir Lesnichy, R7LV

**ASIA**  
**Arthur Avrunin, 4X2M**  
**(4X4DZ, 4Z4AK, 4Z5LA, 4X6FR, UZ5DX, UT5EL, UT5ECZ, UA9CDC, LY5W ops)**  
**Donor:** Nodir Tursoon-Zadeh, EY8MM

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

**SSB**  
**SINGLE OPERATOR**  
**World**  
**Peter H Briggs, K3ZM**  
**Donor:** Nodir Tursoon-Zadeh, EY8MM

Notably missing was the VY2ZM superstation from Prince Edward Island in Canada.

Jeff was in Svalbard this weekend, and rented JW5E for one night. What he didn't count on was the aurora in the sky at the same time (see photos). Jeff operated 15 hours on Saturday night, making just 51 hard fought contacts. Now *that* is dedication.

Mark, KD4D, repeated his 2018 win from the U.S.; of course, operating from the W3LPL superstation helped a bit. N7IR from the west coast managed to break 100K points in Low Power and improve on last year's second-place finish.

In Canada, VE3VN, VE3VSM, and VE3YT were all bunched in the 230-260K range in low power.

Thanks to all the trophy donors, it is greatly appreciated. There were multiple repeat winners from 2018 this year: UA2FZ, JH4UYB, AC6DD, W1UE, VE3VN, KD4D, W8GP,

ED8W, KH7XS, K2PM, VE3MGY, E77Y, LY4A, 4X2M, OK7K, P40AA. Congratulations to all!

### Around the World

There were lots of guest ops in the hugely popular Single-op Assisted category (over 1,166 logs submitted) and there were 16 stations to make over 800K points.

CT9ABO.....	2,452,908	VE3NE .....	983,196
OM7M .....	1,210,560	VA2WA .....	964,348
LX7I .....	1,133,713	SN2M .....	949,960
P33W .....	1,551,716	G5W .....	920,734
VE3EJ .....	1,128,660	XE2X .....	865,920
P40AA .....	1,502,439	UA2FZ .....	845,250
DL6FBL.....	1,030,710	G3TXF .....	834,176
SN7Q .....	1,010,850	9A3TR.....	817,530

**U.S.A.**  
Steven Sussman, W3BGN  
Donor: W4PZV/W4SVO Memorial by Rick Dougherty, NQ4I

**Canada**  
Yuri Onipko, VE3DZ  
Donor: Tom Haavisto, VE3CX

**U.S.A. – Zone 3**  
Leon Madziarski, NJ6P  
Donor: Nate Moreschi, N4YDU

**U.S.A. – Zone 4**  
David Jorgensen, WD5COV  
Donor: Alabama Contest Group

**U.S.A. – Zone 5**  
John Slusser, WF2W  
Donor: Brent Scott, WR5O

**Africa**  
Manuel Angel Martin Brito (EA8DO), ED8W  
Donor: Carl Henson, WB4ZNH

**Asia**  
Hudaverdi Gunes, TA7OM  
Donor: CQ 160 Contest Committee

**Europe**  
Dmytro Pavlik (UZ5DX), CU4DX  
Donor: James "Skip" Riba, WS9V

**European Russia**  
Sergey Chebotarev, RW1F  
Donor: UA2 Contest Club

**Asiatic Russia**  
Mikhail S. Ilyashenko, RA9Y  
Donor: Steven "Sid" Caesar, NH7C

**North America**  
Stan Stockton, ZF9CW  
Donor: CQ magazine – K2EEK Memorial

**South America**  
Victor Manuel Cuesta Gutierrez (YV4DYJ), YW4V  
Donor: John Rodgers, WE3C

**Oceania**  
Bill Kollenbaum (K4XS), KH7XS  
Donor: Steve "Sid" Caesar - NH7C

**Southern Hemisphere**  
Dave Sullivan, ZL2OK  
Donor: John Rogers, WE3C

**World Assisted**  
Rolandas Jokubauskas, LY4A  
Donor: Ray Sokola, K9RS

**Europe Assisted**  
Petr Clupny (OK1BN), OK7K  
Donor: Curtis Rose, N2ZX

**U.S.A. Assisted**  
Bryan Bydal, W5MX  
Donor: Pete Michaelis, N8TR

**U.S.A. Assisted – Zone 4**  
Peter Madsen, K2PM  
Donor: Pete Michaelis, N8TR

**World Low Power**  
Emir Tubic, E74O  
Donor: Chuck Dietz, W5PR

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

**Europe Low Power**  
Olivier Seizelet (F1AKK), TM6M  
Donor: Contest Club Ontario

**Canada Low Power**  
Brian Campbell, VE3MGY  
Donor: Rudy Bakalov, N2WQ

**World QRP**  
Maksim Kesic, E77Y  
Donor: John Rodgers, WE3C

**MULTI-OPERATOR**  
World  
Massimo Cortesi, PJ4G  
(IZ4DPV, K2NG ops)  
Donor: Southeastern DX Club

**U.S.A.**  
Bob Schenck (N2OO), N2CW  
(K2GMT, K2RET, K8PT, KS3F, KZ2I, N2HM, N2HYG, N2OO, W2CG, W2NO, WN9Q, WS2C ops)  
Donor: Jerry Rosalius, WB9Z

**Europe**  
Andy Kazantsev, UA7K  
(R6KVA, RW7K, UB7K ops)  
Donor: South Jersey DX Association, N2CW

**Zone 3**  
SRRCC, K7JR  
(K7MK, K7ZO, NK7U ops)  
Donor: Paulo, PV8DX

OM3GI, RA3AUU, DL4MM, OM5ZW, DL3BPC, SP7GIQ, and VE3NE all made the top 10 as guests. Harry, RA3AUU, reported less than stellar conditions from Cyprus at P33W. Mathias, DL4MM, operating from P4QAA., spent some days trudging through the vegetation to erect Beverage antennas. Igor, UA2FZ, kept up his trophy winning streak with a cool 845K.

For purposes of this contest and for the last time this year, Low Power and High Power scores are listed together by tradition. A further breakdown can be found on CQ160.com using our data-sorting tool.

The multi-op team at 4X2M edged out last year's winner, HG8DX, by less than 100K after log checking. Once again, the advantage of continental scoring is evident as points are higher for inter-continental QSOs.

Ash, KF5EYY, operated 3V8SF to the top low-power score in the world. Ash reported great conditions to the U.S. at sunrise, allowing him to get some juicy multipliers.

And what can we say about the QRP gang? It takes a certain amount of intestinal fortitude to stick it out on Topband with 5 watts or less. All of the following stations have broken 100K

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QRP, congratulations to all: DJ7WW, OL4W, E77Y, YL2QN, OL9R, EE3X, and SEØX.

There is also quite a bit of activity from Zone 16 in this contest. In Russia, you cannot quite make the biggest scores due to the point structure. However, some great scores were made by R8WF, UA9BA, UX1UA, and R7KR. In LP, EU1AA and R7KR had a good battle as well. In Zone 15, HG5D and 9A2AJ were first and second, respectively. Zone 14 was taken by TM6M by quite a margin, with the top three filling up as follows:

TM6M .....	1,065,875
GM5X .....	809,970
HBØ/DL5SE .....	599,250

### SSB Results

There were 1,223 logs submitted for SSB, down slightly from 2018; with Single-Op Low Power and Single-Op Assisted almost exactly equal as the most popular. The conditions were very favorable this year with some great openings. Check out what the Single-Op World winner Peter, K3ZM, had to say about the propagation:

*"Conditions were not bad here. No troublesome QRN, and signal levels were normal. Except that there was an absolutely fantastic period on Friday evening, about sunrise in the Middle East, when signal levels rose to an impossibly high level. I got called by 4LØG, who said I was 'booming.' A moment later, I got called by 9K2HN, who was S9 + 15 dB on the meter! I have never heard the Middle East that loud on 20 meters."*

On the other hand, UZ5DX operating at CU4DX for second place in Single-op in the world, reported bad QRN levels on the first night.

### Single Op

Since K3ZM was able to win the world trophy, that opened up the U.S. trophy to long time Topbander Steve, W3BGN. Congratulations to Bravo Golf November! The top five were:

K3ZM .....	453,130
W3BGN .....	296,088
WF2W .....	249,369
W1XX .....	226,080
W1EQO .....	221,076

In the rest of the world, there was some nice competition all above 300K:

CU4DX .....	353,662
ZF9CW .....	337,269
ES5RW .....	333,760

ZF2AM .....	324,412
EW6W .....	324,000
I5JVA .....	318,032

Congratulations to Stan, ZF9CW, who said this about the contest and outlasted his fellow Cayman Islander John ZF2AM: *"8 hours into the contest, I had a total of 250 contacts, was bored and couldn't stay awake. Saturday, I put my top-loading wires up higher, put down another dozen radials and came back to announce to my wife that I was loaded for bear and not a quitter, promising to*

*at least stay on the radio until the sun was up in Europe."*

For Canada, where the 5-point VE to U.S. advantage is evident, the top 3 rounded out:

VE3DZ .....	304,113
VE3PN .....	231,312
VE3CKO .....	210,160

In the U.S., Zone 3, it was really rough going. Top scores were only at 55k:

NJ6P .....	55,650
N7AU .....	32,968



TKØC took first place in CW Multi-Op in the world. The team was comprised of S57AL, S53F, S53RM, and S57C. (Photo by S55OO)



Here is Mario, LU8DPM, whose favorite band is 160 meters. But it's really hard to work stations from Argentina in February (South American summer). Thanks to Mario for his hard work.

2019 CQWW 160M CONTEST TOP SCORES

CW

CW USA: K3ZM 784,080, K1LZ 717,960, K1BX 605,400, K1DG 588,276, AA1K 585,242, K1KI 575,592, K1LT 558,376, NA8V 503,274, K5ZD 471,856, W4CB 462,961

CW VE: VE3JM 731,449, VE3AT 701,415, VE3PN 425,505, \*VE3VN 269,110, VE6BBP 248,883, \*VE3VSM 229,401, \*VE3YT 228,960, VE3KZ 198,660, VE3KP 198,208, \*VE3XL 141,636

CW Zone 3: AC6DD 178,925, \*N7IR 114,381, K7CW 108,388, W7YAO 101,602, W6AYC 74,514, N6BT 72,829, \*W6JTI 66,560, K7RL 65,076, K4XU 61,841, VA7ST 59,201

CW Zone 4: VE3JM 731,449, VE3AT 701,415, K1LT 558,376, NA8V 503,274, VE3PN 425,505, NR5M 298,900, K0EJ 269,568, \*VE3VN 269,110, K2CUB 251,190, K9ZO 251,160

CW QRP: \*\*DJ7WW 203,970, \*\*OL4W 186,480, \*\*E7Y 176,680, \*\*YL2QN 162,848, \*\*OL9R 153,552, \*\*EE3X 112,860, \*\*SE0X 109,933, \*\*S53AR 95,350, \*\*N9SE 92,105, \*\*SP3IOE 75,856

CW DX: CN2CO 2,477,250, D4C 1,663,360, ED8W 1,230,576, NP2J 1,076,619, TM6M 1,065,875, EA8/EA4BQ 949,725, GM5X 809,970, KH7B 707,292, UN9L 686,428, \*3V8SF 664,830

CW Zone 14: TM6M 1,065,875, GM5X 809,970, HB0/DL5SE 599,250, F5VMN 383,565, OU2I 367,146, GM4Z 338,490, G4DRS 242,364, G4L 219,868, LB6GG 204,060, \*\*DJ7WW 203,970

CW Zone 15: HG5D 601,588, 9A2AJ 477,900, \*E740 464,016, \*40AA 462,267, LY4T 435,942, OM7RU 409,875, \*HG0R 383,640, SP2LNV 372,172, \*IK2CLB 321,300, OH2YL 288,402

CW Zone 16: UX1UA 478,392, R8WF 403,310, \*EU1AA 184,758, UT3QU 175,071, UX1HW 171,456, \*R7KR 164,920, R7NW 163,374, UT7NY 162,064, R3ZZ 160,003, \*RT3K 157,876

CW Russia: R8WF 403,310, UA9BA 288,180, UA9QM 223,183, \*R7KR 164,920, \*RA0LQ/MM 164,515, R7NW 163,374, R3ZZ 160,003, \*RT3K 157,876, \*UA5F 152,043, RM1T 133,212

CW LOW POWER World: \*3V8SF 664,830, \*E740 464,016, \*40AA 462,267, \*HG0R 383,640, \*IK2CLB 321,300, \*OK7Y 277,104, \*KD4D 272,332, \*LY4L 270,300, \*VE3VN 269,110, \*OK2BFN 268,328

CW LOW POWER W/VE: \*KD4D 272,332, \*VE3VN 269,110, \*VE3VSM 229,401, \*VE3YT 228,960, \*WB8JJI 177,122, \*W9XT 160,134, \*W0UO 154,791, \*WB8WQ 146,890, \*VE3XL 141,636, \*K1EP 137,060

CW QRP W/VE: \*\*N9SE 92,105, \*\*W8GP 62,037, \*\*K4TO 46,980, \*\*WC4X 35,776, \*\*K8ZT 33,814, \*\*N4AX 29,376, \*\*W9CC 19,845, \*\*N0UR 19,737, \*\*NX9G 17,940, \*\*VE3DQN 15,624

CW MULTI-OPERATOR WORLD: TK0C 1,840,484, PJ2T 1,701,310, C6AGU 1,458,858, 4X2M 1,250,200, OK7K 1,189,800, UA7K 1,164,114, HG8DX 1,157,698, HB9CA 1,143,480, VO2AC 1,141,504, E7DX 1,122,203

CW MULTI-OPERATOR W/VE: VO2AC 1,141,504, N5DX 888,420, W2GD 842,156, K0DI 730,849, KM3T 693,852, NR4M 674,625, K3LR 670,824, N1LN 631,800, VE2OJ 533,715, W5MX 478,077

CW ASSISTED WORLD: +CT9ABO 2,452,908, +P33W 1,551,716, +P40AA 1,502,439, +OM7M 1,210,560, +LX7I 1,133,713, +VE3EJ 1,128,660, +DL6FBL 1,030,710, +SN7Q 1,010,850, +VE3NE 983,196, +VA2WA 964,348

CW ASSISTED W/VE: +VE3EJ 1,128,660, +VE3NE 983,196, +VA2WA 964,348, +VE3RZ 689,946, +W1UE 508,762, +WB9Z 504,836, +N2ZX 502,448, +VE3CX 501,120, +N2NT 483,210, +K3WW 479,402

CW SSB USA: K3ZM 453,130, W3BGN 296,088, WF2W 249,369, W1XX 226,080, W1EQO 221,076, AF1T 178,728, WD5COV 177,030, K0TT 167,360, K3ZO 161,508, W3TS 155,763

CW VE: VE3DZ 304,113, VE3PN 231,312, VE3CKO 210,160, \*VE3MGY 171,006, VE6BBP 117,120, VE3KZ 81,339, \*VA3AC 78,120, VE3KP 42,930, VE2FXL 40,911, \*VE4TV 34,528

CW Zone 3: NJ6P 55,650, N7AU 32,968, K7CW 29,590, N6BT 23,430, VE7NY 18,438, N6AA 16,023, N7RK 15,700, K7IU 15,080, N7GP 14,504, W7MEM 13,392

CW Zone 4: VE3DZ 304,113, VE3PN 231,312, VE3CKO 210,160, WD5COV 177,030, \*VE3MGY 171,006, K0TT 167,360, NA8V 125,375, VE6BBP 117,120, \*W8CO 112,962, W0NO 105,151

CW QRP: \*\*E7Y 45,920, \*\*DK2LO 28,584, \*\*SQ2NNN 20,636, \*\*UR5VAA 20,243, \*\*UT5EOX 17,763, \*\*UR5FEO 17,344, \*\*R2FI 16,016, \*\*W8GP 13,904, \*\*SP1FPG 12,096, \*\*DD9WG 11,252

CW DX: CU4DX 353,662, ZF9CW 337,269, ES5RW 333,760, ZF2AM 324,412, EW6W 324,000, I5JVA 318,032, DJ7WW 272,571, +SN7Q 258,712, \*E740 173,250, SQ1OD 157,450

CW Zone 14: CU4DX 353,662, DJ7WW 272,571, \*TM6M 123,964, G5Q 100,260, CT2ITR 73,101, \*DL0NG 55,169, DL4RCE 49,960, \*G2X 48,624, \*PE2JMR 47,424, M1ERL 46,395

CW Zone 15: ES5RW 333,760, I5JVA 318,032, \*E740 173,250, SQ1OD 157,450, LY4T 139,590, \*LY4L 121,662, LY2BVB 104,569, OM7RU 92,664, IK7YTT 85,488, \*OM5WW 85,095

CW Zone 16: EW6W 324,000, RW1F 258,712, UX1UA 151,776, EW8R 83,181, \*UT1AN 81,196, RT9S 53,162, \*UR5TM 49,751, RZ3MM 47,150, RA1TDP 43,880, \*RK6AQP 39,368

CW Russia: RW1F 258,712, RT9S 53,162, RZ3MM 47,150, RA1TDP 43,880, \*RK6AQP 39,368, RC5Z 36,176, \*RW7M 35,820, UA9BA 34,560, \*UA1CUR 27,900, \*RA9AU 25,218

CW LOW POWER WORLD: \*E740 173,250, \*VE3MGY 171,006, \*TM6M 123,964, \*LY4L 121,662, \*W8CO 112,962, \*OM5WW 85,095, \*UT1AN 81,196, \*VA3AC 78,120, \*SQ4JEN 74,284, \*W4ZAO 70,211

CW LOW POWER W/VE: \*VE3MGY 171,006, \*W8CO 112,962, \*VA3AC 78,120, \*W4ZAO 70,211, \*W1LJD 59,768, \*N8XTH 51,720, \*AJ3T 46,805, \*KS3D 44,022, \*KP4KE/W4 42,752, \*WK9U 41,085

CW QRP W/VE: \*\*W8GP 13,904, \*\*W7BAK 4,186, \*\*K8ZT 3,750, \*\*VE6EQ 3,026, \*\*N8OO 2,850, \*\*K3TW 1,224, \*\*W1TW 1,080, \*\*W9QL 380, \*\*AC6YY 216, \*\*KK7VL 105

CW MULTI-OPERATOR WORLD: PJ4G 599,676, N2CW 515,250, UA7K 496,254, HB9CA 466,146, HG8DX 465,888, SN8B 416,970, K1LZ 415,035, OK4C 377,118, W1NA 365,598, N2CEI 338,661

CW MULTI-OPERATOR W/VE: N2CW 515,250, K1LZ 415,035, W1NA 365,598, N2CEI 338,661, ND8DX 281,688, AB8M 123,824, WG3J 102,708, NE3F 80,010, K0OO 68,072, W9VW 66,396

CW ASSISTED WORLD: +LY4A 620,400, +OK7K 611,252, +KV4FZ 362,637, +S57DX 350,973, +HB90CXZ 319,226, +S53O 309,680, +MI0SLE 278,124, +OK1JDX 265,434, +DK6WL 264,060, +UR5AS 258,488

CW ASSISTED W/VE: +W5MX 230,018, +K2PM 206,890, +K3WW 193,533, +W3LL 193,452, +N4RV 183,870, +VE3CX 172,590, +WX4G 143,726, +W5PR 141,017, +KC4NX 129,560, +W2DAN 124,254

CW \*Low Power +Assisted: \*\*E740 173,250, \*\*VE3MGY 171,006, \*\*TM6M 123,964, \*\*LY4L 121,662, \*\*W8CO 112,962, \*\*OM5WW 85,095, \*\*UT1AN 81,196, \*\*VA3AC 78,120, \*\*SQ4JEN 74,284, \*\*W4ZAO 70,211



Dan, K8RF, steered contest station NP2J to a fourth-place finish in Single-Op CW in the world with a cool 1.1 million points.

In Zone 4, where being in the center of activity is a big help, we had some nice competition with David, WD5COV, continuing his streak as the top scorer:

WD5COV .....	177,030
KØTT .....	167,360
NA8V .....	125,375
WØNO .....	105,151
WN8HCV .....	103,464
WD5R .....	101,016

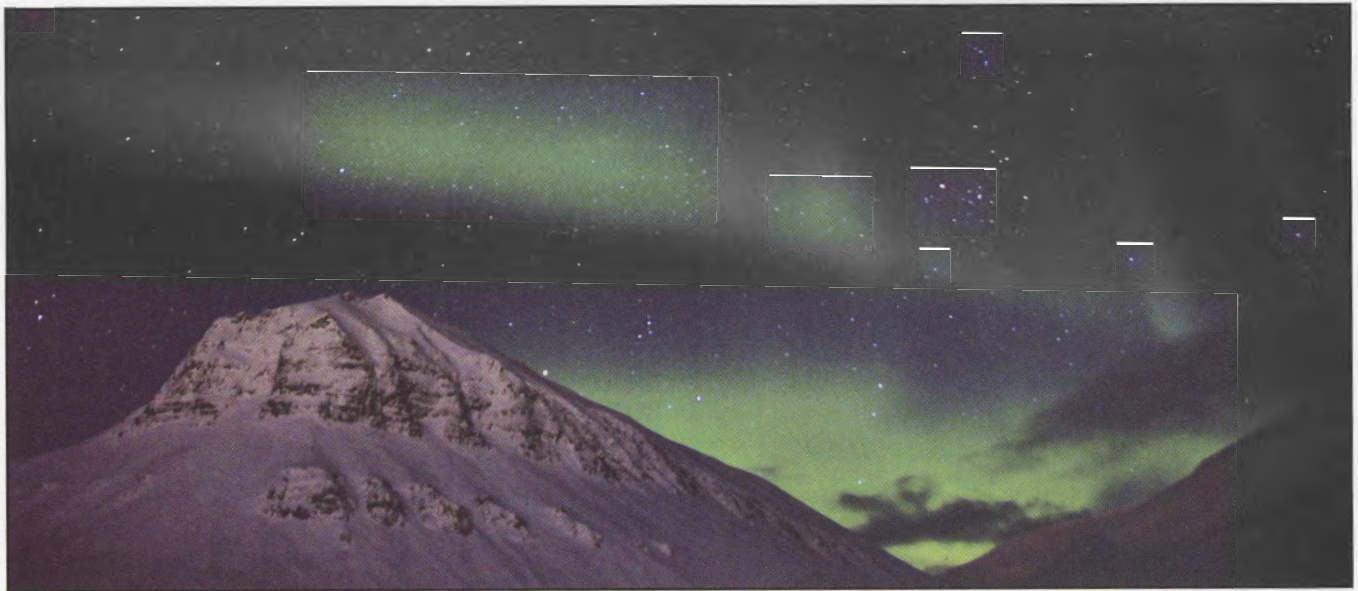
If you think QRP is bad on CW, try it on 160 SSB. Good Luck! These guys have some great stamina and patience:

E77Y .....	45,920
DK2LO .....	28,584
SQ2NNN .....	20,636
UR5VAA .....	20,243
UT5EOX .....	17,763
R2FI .....	16,016
UR5FEO .....	17,344
W8GP .....	13,904

### 2019 CQWW 160M CONTEST CLUB SCORES

(Minimum of 3 three entries required for listing)

SCORE	#ENTRIES	CLUB	SCORE	#ENTRIES	CLUB
28,359,407	195	BAVARIAN CONTEST CLUB	537,466	15	SOUTH EAST CONTEST CLUB
13,928,109	150	POTOMAC VALLEY RADIO CLUB	525,296	6	WORLD WIDE YOUNG CONTESTERS
12,050,036	105	FRANKFORD RADIO CLUB	519,707	9	NIAGARA FRONTIER RADIOSPORT
9,782,217	96	YANKEE CLIPPER CONTEST CLUB	517,242	5	RIO DX GROUP
9,069,507	53	CONTEST CLUB ONTARIO	500,830	8	ORCA DX AND CONTEST CLUB
8,236,620	78	UKRAINIAN CONTEST CLUB	494,660	9	RUSSIAN CW CLUB
7,604,145	59	RHEIN RUHR DX ASSOCIATION	488,160	3	SAUDI CONTEST GROUP
6,301,799	11	BELOKRANJEC CONTEST CLUB	486,295	6	CSM TIMISOARA
5,681,483	27	ITALIAN CONTEST CLUB	467,940	9	KANSAS CITY CONTEST CLUB
5,366,485	35	RUSSIAN CONTEST CLUB	433,610	12	WILLAMETTE VALLEY DX CLUB
5,113,114	88	SOCIETY OF MIDWEST CONTESTERS	408,361	12	WESTERN WASHINGTON DX CLUB
4,984,868	38	KAUNAS UNIVERSITY OF TECHNOLOGY RADIO CLUB	396,486	20	SOUTHERN CALIFORNIA CONTEST CLUB
4,715,934	23	MAD RIVER RADIO CLUB	390,753	5	GEORGIA CONTEST GROUP
4,204,706	13	CROATIAN CONTEST CLUB	371,396	10	MOTHER LODE DX & CONTEST CLUB
4,198,182	12	SLOVENIA CONTEST CLUB	361,276	6	BLACK SEA CONTEST CLUB
4,174,973	34	SP DX CLUB	357,963	7	BIG SKY CONTESTERS
3,668,066	23	CONTEST CLUB FINLAND	352,111	7	THRACIAN ROSE CLUB
3,126,026	27	FLORIDA CONTEST GROUP	350,287	14	CAROLINA DX ASSOCIATION
2,765,943	45	ARIZONA OUTLAWS CONTEST CLUB	348,624	3	SP5PPK
2,479,649	14	EA CONTEST CLUB	262,959	5	DEEP DIXIE CONTEST CLUB
2,361,939	13	LATVIAN CONTEST CLUB	254,142	5	NORTH TEXAS CONTEST CLUB
2,346,860	10	HUNGARIAN DX CLUB	243,869	7	BRISTOL (TN/VVA) ARC
2,220,330	41	MINNESOTA WIRELESS ASSN	236,731	4	BAY AREA DXERS
2,192,930	15	BELARUS CONTEST CLUB	220,323	4	SPANDAUX DXERS
2,127,734	9	URAL CONTEST GROUP	215,605	3	NORTH CAROLINA DX AND CONTEST CLUB
2,028,077	8	UA2 CONTEST CLUB	193,385	3	VLADIMIR RADIO CLUB
1,900,212	13	VYTAUTAS MAGNUS UNIVERSITY RADIO CLUB	192,099	9	YO DX CLUB
1,829,627	23	TENNESSEE CONTEST GROUP	191,119	4	UR-QRP-CLUB
1,739,950	3	LZ CONTEST TEAM	185,786	3	GERMAN DX FOUNDATION
1,739,056	8	MARITIME CONTEST CLUB	173,031	5	PORTAGE COUNTY AMATEUR RADIO SERVICE
1,633,570	10	CONTEST CLUB SERBIA	167,647	4	LA-DX-GROUP
1,586,461	12	DANISH DX GROUP	142,459	3	CSM CRAIOVA
1,513,248	15	HUDSON VALLEY CONTESTERS AND DXERS	141,025	6	SHENANDOAH VALLEY WIRELESS ASSOCIATION
1,378,088	7	GIPANIS CONTEST GROUP	134,482	3	SARATOVSKAYA OBLAST RADIO CLUB
1,313,424	17	NORTH COAST CONTESTERS	120,729	8	SWAMP FOX CONTEST GROUP
1,273,821	12	KENTUCKY CONTEST GROUP	116,780	4	CENTRAL SIBERIA DX CLUB
1,164,681	6	CONTEST GROUP DU QUEBEC	116,382	3	LKK LVIV SHORTWAVE CLUB
1,154,996	7	ALRS ST PETERSBURG	83,999	5	HILLTOP TRANSMITTING ASSOCIATION
1,092,539	11	CHILTERN DX CLUB	73,092	5	RU-QRP
1,084,161	3	FLORIDA WEAK SIGNAL GROUP	72,822	3	DONBASS CONTEST CLUB
1,025,125	30	NORTHERN CALIFORNIA CONTEST CLUB	67,296	4	ROCHESTER DX ASSOCIATION
955,812	11	CTRI CONTEST GROUP	57,896	5	KIROVOGRAD REGION RADIO CLUB
922,041	3	BOSNIA AND HERZEGOVINA CONTEST CLUB	49,216	3	ARKTIKA
835,673	28	DEUTSCH AMATEUR RADIO CLUB	48,367	6	SPOKANE DX ASSOCIATION
832,134	12	CENTRAL TEXAS DX AND CONTEST CLUB	47,350	4	IVANOVO DX CLUB
810,388	14	GRAND MESA CONTESTERS OF COLORADO	46,591	3	METRO DX CLUB
741,068	9	VERON	44,030	4	BERGEN AMATEUR RADIOASSOCIATION
740,993	14	DFW CONTEST GROUP	42,655	5	ARAUCARIA DX GROUP
689,649	3	S59ACP	16,652	3	NEW PROVIDENCE ARC
668,032	11	ALABAMA CONTEST GROUP	14,796	3	WEST PARK RADIOPS
661,753	5	LITHUANIAN CONTEST GROUP	10,422	3	SERPUKHOV RADIO CLUB
650,875	6	OK1KQJ CONTEST CLUB	9,835	3	KHARKIV REGIONAL AMATEUR RADIO SOCIETY
610,063	4	NRRL	9,108	3	VLADIMIR CONTEST CLUB
607,980	5	TEXAS DX SOCIETY	7,606	3	CS PANDURII TARGU - RADIOAMATOR
563,985	4	SOUTH URAL CONTEST CLUB	1,092	4	YB LAND DX CLUB
			170	9	ORARI LOKAL KEDIRI



Why did K1ZM work only 50 stations from JW? Check out the beautiful aurora in the night sky. Great for tourists, not so great for radio.

In Europe's Zone 14, DJ7WW reported good conditions only the first night. With only four scores over 100K, one of them was made by TM6M in Low Power.

CU4DX .....	353,662
DJ7WW .....	272,571
TM6M .....	123,964
G5Q .....	100,260

There was a nice competition in Zone 15 with Rein, ES5RW, operating from Tonno, ES5TV's, superstation.

*"Decent first night propagation enabled me to log the best number of states in this contest so far, the second night was tough."*

ES5RW .....	333,760
I5JVA .....	318,032

From Russia and Zone 16 we have all over 100K:

EW6W .....	324,000
RW1F .....	258,712
UX1UA .....	151,776

With UA2FZ at 169,408 in Single Op Assisted.

The most popular category - Single-Op Assisted with 403 entries - had a nice assortment of stations over 300K and two stations from the US. over 200K.

Rolandas, LY4A, reported:

*"Thanks for all callers. We had great Friday night propagation."*

LY4A .....	620,400
OK7K .....	611,252
S57DX .....	350,973
KV4FZ .....	362,637
HB9ØCXZ .....	319,226

S53O .....	309,680
W5MX .....	230,018
K2PM .....	206,890

Single Op LP World scores over 100K were:

E74O .....	173,250
VE3MGY .....	171,006
TM6M .....	123,964
LY4L .....	121,662
W8CO .....	112,962

Special mention to Brian, VE3MGY, for his repeat win in Canada Low Power. By far the most intense competition was in Multi-op. The boys from N2CW reported the following:

*"Operating from our awesome SJDXA club station on Barnegat Bay in Southern New Jersey that we share with W2GD! Great overall conditions."*

The top stations all over 300K were:

PJ4G .....	599,676
N2CW .....	515,250
UA7K .....	496,254
HB9CA .....	466,146
HG8DX .....	465,888
SN8B .....	416,970
K1LZ .....	415,035
OK4C .....	377,118
W1NA .....	365,598
N2CEI .....	338,661
LZ5R .....	335,496
OL1R .....	328,080
PJ4DX .....	307,242

### A Note About Sportsmanship

There were few complaints this time about disruption to FT8 operation. There

were numerous complaints about power abuse. It is nearly impossible to monitor power levels; this is supposed to be on the honor system.

Also, there were some complaints about frequency encroachment. The appropriate stations were contacted and made aware of the situation.

Remember, if you abuse the rules, you are not only cheating others but cheating yourself. This year, as in the past, we did reclassify some stations based on RBN analysis.

Since RBN is not definitive, we felt disqualification was not warranted. But in the future, we may not be as lenient. As technology improves, it will be easier to identify outliers.

In closing, I want to offer a special thanks to those whose invaluable contributions make 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 *callsign used*. Trophies will be mailed shortly. Thanks to all for participating and see you in 2020. Remember, all CQ contests have a 5-day deadline for submitting logs. Check out the rules on CQ160.com for the latest information. There will be some added categories in 2020, stay tuned for details.

- 73, Andy, N2NT  
Director, CQ160 Contest

(Scores on page 102)





U.S. Virgin Islands				*JAGGCI				Estonia				DF5RF				*IK2AIT			
NP2J	1,076,619	1362	57 66	JA2ZL	1	-1	3 5	11,928	100	0 24	88,347	402	0 49	511	17	0 7			
<b>AFRICA</b>				<b>Kazakhstan</b>				<b>European Russia</b>				<b>Kaliningrad</b>							
Canary Islands				UN9L	686,428	1064	1 70	*R7KR	164,920	545	0 62	*DL2SWW	77,142	399	0 43	*UA2FL	60,610	317	0 38
ED8W	1,230,576	1004	49 75	*UN77CN	46,290	169	0 30	R7NW	163,374	433	7 66	*DL2SNG	74,154	356	0 46	UA2CZ	36,001	194	1 36
EA8EA4BQ	949,725	913	42 63	UN7FW	296	10	0 4	*R7TK	157,876	576	0 58	DL10TL	63,135	304	0 45	*RN2FO	19,256	134	0 29
EAB8MG	115,083	206	14 43	<b>Republic Korea</b>				*UA5F	152,043	548	2 57	*DK3YD	56,804	287	1 43	*RA2FB	10,465	90	0 23
EA6TZ	50,217	92	18 39	DS2JIV	23,722	143	5 24	RM1T	133,212	567	0 51	*DL4ZA	56,277	333	0 39	<b>Latvia</b>			
Cape Verde				DS3EXX	13,842	153	0 18	RD4F	113,630	437	0 55	*DH2URF	56,016	244	1 47	*YL3GAZ	169,722	616	2 52
D4C	1,663,360	1307	50 78	*HL2VXX	415	19	0 5	R3FX	111,364	548	0 44	DD7NT	55,152	249	0 48	YL2EM	130,950	481	1 53
Morocco				*HL4CFN	380	22	0 4	*UD4C	96,656	353	0 56	*DL4DZ	52,520	314	0 40	*YL2I1	70,602	332	0 42
CM2CO	2,477,250	1844	54 81	DL2AS2	45	3	0 3	*RL6M	94,900	403	0 50	DU70Q	51,660	242	0 45	*YL2H	18,900	125	0 30
Tunisia				<b>Taiwan</b>				*UA1CUR	94,668	436	0 46	*DL6AVH	51,042	233	0 47	*YL2EA	10,700	113	0 20
*3V8SF	664,830	806	17 66	BV1EK	1,225	50	0 5	*UA9R	85,268	324	0 54	DF8JF	50,266	291	0 41	<b>Liechtenstein</b>			
<b>ASIA</b>				<b>EUROPE</b>				*RM6Y	79,980	405	0 43	*DL1KWK	49,764	286	0 39	HB0/DL5SE	599,250	1315	22 63
Asiatic Russia				Andorra				*RW7M	74,300	310	0 50	*DM3PKK	45,838	215	0 41	<b>Lithuania</b>			
R6WF	403,310	719	0 62	C31CT	4,800	46	0 20	*RJ4I	66,444	333	0 42	DL5LY	45,448	270	0 38	LY4T	435,942	1030	15 66
UA9BA	286,180	628	0 60	OE1TKW	277,848	722	13 59	RD30K	58,578	322	0 39	*DJ5WJ	41,820	227	0 41	*LY4L	270,300	895	1 59
UA9CM	223,183	466	0 53	*OE6CUD	41,638	220	0 38	RM4HZ	53,718	232	0 42	DJ8ES	41,536	205	0 44	*LY2TS	242,466	682	7 62
*UA9AX	119,886	256	0 53	*OE6CUD	41,638	220	0 38	RL3BZ	51,781	194	0 53	*DL2ZA	41,000	230	1 39	LY1DZ	231,384	723	0 62
*UA9W	105,780	292	0 41	*OE6STD	32,506	205	0 32	*RA6FYL	48,000	215	0 45	KKPSU	38,025	221	0 39	LY9Y	209,001	564	9 60
RW9DX	58,684	211	0 34	<b>Azores</b>				R30D	46,880	214	0 45	*DM4BE	35,958	205	0 39	*LY2BVA	126,655	448	1 54
*RA9CCK	54,040	221	0 28	CUSAN	3,465	23	6 15	RJ3A	43,952	240	0 41	*DL5ARM	34,542	206	0 38	*LY2NZ	122,500	506	2 47
RW9QA	23,500	115	0 25	*CUSAA	30	2	0 2	RA3NC	43,840	240	0 40	*DK0MN	32,868	207	0 36	*LY2N3	86,988	407	0 44
*RJ9M	20,692	92	0 28	<b>Balearic Islands</b>				*R30M	42,750	251	0 38	*DK7YD	31,374	149	0 42	*LY2MX	56,640	278	0 40
*RJ9N	15,984	100	0 24	*EA6AMM	11,222	67	0 31	*UA4PAY	41,458	234	0 38	*DL7YMM	30,534	150	0 42	*LY5XX	46,345	307	0 31
RW0LBM	12,960	120	2 18	OE1TKW	277,848	722	13 59	*RA4HBS	41,440	237	0 37	*DL3EAC	30,081	179	0 37	*LY2M3	30,393	189	0 33
R90K	12,504	72	0 24	*OE6CUD	41,638	220	0 38	*RM3F	39,146	235	0 37	*DL0MCM	29,988	197	0 34	*LY2S2	30,150	213	0 30
*RK0D	12,141	64	0 19	*OE6CUD	41,638	220	0 38	RA4HS	37,100	241	0 35	DH6BB	27,262	123	0 43	*LY4R	28,750	126	0 46
RZ9YI	11,340	81	0 21	*OE6STD	1,890	27	0 14	R30D	38,300	235	0 35	DL6BRH	24,570	157	0 35	*LY9A	7,956	98	0 18
*R9AB	6,720	56	0 15	*EU1AA	184,758	682	1 52	R04D	36,320	225	0 35	*DK6CT	24,087	132	0 37	<b>Macedonia</b>			
*UA9AGC	3,224	44	0 13	EW1I	143,144	469	1 57	RSFY	35,350	123	0 50	DL3KUD	23,902	156	0 34	*Z33A	7,812	74	0 21
*RA9MX	2,133	39	0 9	EW80M	107,715	496	0 43	*RW3DW	35,190	152	0 45	DL4FDF	22,916	153	0 34	<b>Moldova</b>			
RA9SMS	2,028	31	0 12	*EW2ES	92,442	436	0 42	R2PT	33,930	158	0 45	DL5DGY	22,800	141	0 40	*ER5DX	78,120	263	0 56
UA9LHS	1,365	12	3 10	*EW7A	75,952	313	0 47	R7KX	33,760	231	0 32	DL2SWR	22,295	142	0 35	<b>Montenegro</b>			
*UA9LJC	774	29	0 6	*EU8N	33,165	201	0 33	RU3SD	32,383	102	0 53	DF5BX	21,920	161	0 32	*404A	462,267	1078	15 66
*RZ9P	606	22	0 6	*EU6AA	28,054	215	0 26	UA3DCE	32,220	198	0 36	DL7LXL	21,920	116	1 39	<b>Northern Ireland</b>			
*R90Q	360	21	0 3	EW3LN	26,740	151	0 35	RW3RN	26,604	163	0 36	*DH1TST	21,801	109	0 43	*MIBSAI	2,000	24	0 16
<b>Azerbaijan</b>				*EU2EU	24,969	111	7 40	RACSZ	24,854	161	0 34	DL1ATZ	21,714	141	0 33	<b>Norway</b>			
*AK6FO	76,125	236	0 35	*EW7DK	6,821	73	0 19	RT40	24,554	181	0 29	*DJ8JK	21,252	147	0 33	LB6GG	204,050	699	8 49
<b>China</b>				EW1I	184,758	682	1 52	UA4AAC	23,684	173	0 31	*DL3JUN	19,866	93	0 42	*LA3B0	199,706	630	3 50
*B05XX	23,300	173	0 25	Baligum	38,042	157	0 46	*RU600	22,464	121	0 36	*DJ8SN	19,406	136	0 31	*LA7AK	88,572	390	0 44
BG9NXP	1,910	39	0 10	*ON7HLU	38,042	157	0 46	RK7X	21,090	116	0 38	DL6SRD	18,204	98	0 37	*LA2HFA	25,818	130	0 39
*BG2WSS	1,370	28	0 10	*E740	464,016	1038	16 68	R2UZ	19,296	126	0 32	DL3DRN	16,027	121	0 31	*LA6X1	5,037	45	0 23
*BASAB	1,038	36	0 6	E7ZU	58,480	268	1 42	RA3EA	14,445	120	0 27	*DL5ALW	15,756	77	0 39	*LA9WDA	3,060	36	0 17
*B0GSSN	192	12	0 4	<b>Bulgaria</b>				UA3YDI	14,145	146	0 23	DLGEGE	15,600	119	0 30	<b>Poland</b>			
<b>Georgia</b>				LZ1GU	152,890	415	6 61	R9F	13,230	97	0 27	*DF13DEJU	14,375	150	0 25	SP2LHW	372,172	851	20 63
*4L2M	222,192	479	0 48	LZ5DB	33,444	178	0 36	R3AQ	12,714	113	0 26	DL3XM	13,280	80	0 32	SP5AUC	212,410	782	2 53
4L9M	161,028	401	0 42	LZ1HW	29,328	108	0 48	UA4EPR	9,610	100	0 21	*DK9H	12,898	61	0 31	SN2N	147,504	529	5 51
<b>India</b>				LZ1NG	18,072	98	0 36	*RW3CW	9,180	61	0 30	*DJ6TK	12,876	102	0 29	*SP9KDA	129,081	510	0 41
*YU2BS	1,190	16	0 10	*LZ1A	7,854	75	0 21	RC2A	9,048	62	0 29	DL2FQ	12,470	101	0 29	*S030	122,130	535	1 55
<b>Israel</b>				<b>Croatia</b>				RK3Z	8,493	92	0 19	*DL1KVN	12,376	107	0 28	SP2XX	101,949	399	1 50
4Z5LY	77,256	222	0 36	9A2AJ	477,900	1117	11 70	RV32N	8,493	92	0 19	DL7URB	10,374	48	0 42	SP3CJX	83,862	314	1 53
*4Z5MU	67,770	159	1 44	*9A3SM	72,051	303	1 46	*RV3IG	8,313	117	0 17	DL2FQ	9,660	78	0 28	*SP5TAT	82,320	347	0 48
4X11M	25,761	89	0 31	*9A9CW	33,876	138	0 36	RN4HAB	7,984	119	0 16	*DL2FC	8,596	68	0 28	*S05ET	76,944	378	0 42
<b>Japan</b>				*9A4WY	19,239	117	0 33	UA6AUA	7,648	36	0 32	DL2FC	8,596	68	0 28	*SP9NFW	64,199	315	0 43
JH4UYB	321,293	498	24 59	<b>Czech Republic</b>				UA6UVA	7,467	98	0 19	*DL2FCN	8,596	68	0 28	SP1MNM	52,528	212	0 49
JA5DOH	49,147	118	8 41	*DK7Y	277,104	798	9 60	*RX3VF	7,344	92	0 17	DH6DAO	8,164	82	0 26	*SP3JUN	44,422	248	0 38
J13KDH	43,641	156	12 27	*DK2FN	268,328	797	8 60	UA4FPN	7,049	69	0 19	DJ8JA	8,142	78	0 23	SP2MTM	40,348	184	0 44
JE1BMJ	39,840	142	10 30	OK10A	260,848	758	13 55	*UA4NCI	6,443	79	0 17	DL2GAN	5,840	60	0 20	*SP8FK	38,240	256	0 32
J7A7VJ	30,420	67	14 25	OK1DW	188,776	693	3 53	*UA4QK	5,778	74	0 18	*DM2ORI	5,568	53	0 24	SP2EWF	28,512	155	0 36
JH6JF3	20,580	81	6 29	*OK1AXB	177,345	570	10 53	*RA6AAW	5,400	43	0 24	*DJB6T	5,382	50	0 23	*SN8U	23,067	149	0 33
J7A7CAM	19,116	118	7 20	*OK1DKR	175,488	558	10 54	*RU1AT	5,355	85	0 15	*DK4MDA	4,452	43	0 21	*SP8FB	13,392	73	0 36
JR2PMT	13,488	97	6 18	OK1HF	159,744	626	0 52	RK4S	5,180	59	0 20	DL0FR	4,050	51	0 18	*SP9ELM	12,104	94	0 28
JA9FHB	10,000	51	8 17	*OL8A	155,040	631	1 50	R2ZA	5,103	31	0 27	*DL1VL	3,780	39	0 19	*S030	129,081	510	0 41
*JA6WFM	9,597	108	2 19	*OK2HBR	134,436	545	1 50	*RW6MAO	4,416	37	0 23	*DO2NH	3,572	49	0 21	SP2XJX	101,949	399	1 50
*JE1SPY	8,169	107	6 15	OK1XC	130,327	503	4 49	*UA6IGI	3,420	36	0 19	DLBUKE	2,945	33	0 19	SP5CJX	83,862	314	1 53
JH0GHZ	7,810	45	4 18	OK2GG	116,100	482	0 50	UA6HFI	3,184	45	0 16	DL7BA	2,660	23	1 18	*SP5TAT	82,320	347	0 48
*JG6JAV	7,434	94	1 17	OK2EQ	115,828	539	2 44	UA77A	3,040	20	0 20	DL3AA	2,175	34	0 15	*S05ET	76,944	37	

Table with columns for call signs, frequencies, and power levels. Includes sections for various countries like Slovakia Republic, Slovenia, Spain, Sweden, Switzerland, Ukraine, and Vienna Int. Ctr.

OCEANIA section including Australia, Guam, Hawaii, Indonesia, Palau, and South America (Brazil, Colombia, Peru).

NORTH AMERICA section including Canada (Ontario, Alberta), US Virgin Islands, AFRICA (Canary Islands, Ceuta & Melilla), ASIA (Asianic Russia, China, Cyprus, Japan, Kazakhstan), EUROPE (Belarus, Bosnia-Herzegovina, Czech Republic, England, European Russia, Germany, Hungary, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Netherlands, Norway, Poland, Republic of Kosovo, Romania, Serbia, Slovak Republic).

EUROPE section including Slovenia, Spain, Sweden, Ukraine, and ASSISTED NORTH AMERICA UNITED STATES (CONNECTICUT, MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, VERMONT, NEW JERSEY, NEW YORK).

DISTRICT OF COLUMBIA, PENNSYLVANIA, ALABAMA, FLORIDA, GEORGIA, KENTUCKY, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE, and DELAWARE sections.

KS4X	46,800	235	53	19	W7FI	52,864	312	52	12	VE2FK	10,114	87	25	1	JH5MxB	3,349	28	4	13	OV3X	163,725	532	5	54																									
K4AFE	31,740	215	51	9	K7SS	36,344	233	45	11	*VE2AWW	1,430	12	0	13	JA2VQF	2,604	27	0	14	OZ2FT	115,388	432	2	50																									
*WATM	23,500	208	42	5	*NR7RR	10,209	94	37	4	VE2GT	594	15	9	0	JA5FBZ	2,550	20	4	11	OZ8SW	79,626	338	0	46																									
K740	22,361	110	39	20	N7EPD	9,520	87	35	5	<b>ONTARIO</b>										JA7GYP	2,170	25	2	12	OU4N	78,595	273	0	55																				
NS4X	4,686	62	30	3	KE7W	7,582	86	30	4	VE3EJ	1,128,660	1462	58	72	JG1LFR	1,800	35	2	10	*OZ1HK	31,703	121	0	49																									
K1GU	520	8	0	8	<b>WYOMING</b>										JH3CCN	1,495	17	3	10	*OZ1ADL	7,264	44	0	32																									
Virginia																									JR2AWS	1,400	41	1	9	JH1APK	1,177	16	2	9	England	1,100	16	0	10	G5W	920,734	1257	43	79					
W4NF	350,028	1079	58	50	*N7MQ	456	16	12	0	VE3CRZ	689,946	1089	57	61	*JA0BZY	994	33	1	6	G3TXF	834,176	1259	37	75																									
K1UCW	327,865	924	58	57	<b>MICHIGAN</b>										J03TAN	896	30	0	8	G3UJE	605,790	1025	33	73																									
K4XL	296,069	846	56	51	W8MJ	345,824	1136	58	49	*VA3DF	211,375	467	56	33	JR4VEV	820	12	1	9	G6M	543,602	1027	25	69																									
N4RV	281,765	799	57	52	N8EA	130,221	478	54	37	VA3DX	166,320	434	53	24	*J01COB	756	13	0	9	G8D	383,238	727	32	62																									
W4PK	197,778	585	54	48	K8BZ	92,672	612	53	11	VE3KI	127,120	368	53	17	J4EKQH	750	9	1	9	M3A	382,018	754	26	65																									
WA4JJK	122,122	628	54	23	K8CWC	73,865	320	53	26	VE3MV	71,084	290	47	5	*JN1ROV	621	11	1	8	G3VUL	263,169	612	15	86																									
N3JT	78,767	401	51	22	W8UTSUDX	44,608	284	54	10	*VE3CV	70,440	237	48	12	JH8DRL	603	12	1	8	G6M	162,864	458	19	66																									
W3VY	68,769	272	53	28	*W8PI	17,000	134	45	5	*VE3MA	50,869	254	43	0	JH8DJ	544	12	1	7	G3P	165,900	405	18	57																									
KE4S	67,237	326	47	24	<b>OHIO</b>										*J8R0FG	420	26	1	4	G8X	124,000	275	16	64																									
*W4RC	56,286	403	51	8	N8TR	221,379	611	57	52	K8CX	111,888	454	51	33	*JF3GFH	248	18	0	4	*G3RLE	114,253	364	9	52																									
W4LVN	56,232	270	50	22	K8AJX	109,032	708	55	11	K8PK	44,935	366	50	5	JK7OWD	174	23	0	3	M0SDV	89,760	285	7	93																									
K5VIP	53,320	343	50	12	W3HKK	103,110	600	55	15	W8EH	34,556	276	47	6	J04CFV	105	13	0	3	M7Q	89,121	281	11	45																									
K1GG	46,363	231	51	20	K8PK	44,935	366	50	5	KE8M	20,096	81	46	18	*J01EPD	105	5	0	3	G4AFJ	31,948	123	4	50																									
W3IP	41,216	229	47	17	W8EH	34,556	276	47	6	*NBVV	19,012	162	44	5	JM2RUU	2	1	0	1	G3ULB	18,850	65	25	4																									
AB4I	38,556	205	51	17	KE8M	20,096	81	46	18	*W8VU	18,492	160	40	6	JM2RUU	2	1	0	1	G3UJH	11,080	46	1	39																									
N4FX	34,200	236	48	9	KGZK	18,492	160	40	6	<b>WEST VIRGINIA</b>										J02FSM	544	12	1	7	*M0SGJ	9,077	67	0	29																				
*W2YE	26,064	212	41	7	K8SVV	21,615	143	44	11	W89Z	504,836	1326	58	64	UN7LZ	398,924	674	0	63	*G3RTU	3,553	40	0	19																									
*K4GM	25,800	246	38	5	<b>ILLINOIS</b>										UN5GM	45,752	145	0	38	G8X	124,000	275	16	64																									
K4ARRU	25,250	208	45	5	W89N	504,836	1326	58	64	K9NR	244,170	1074	56	34	UN5GJ	10,944	78	0	18	ES2JY	147,460	460	3	57																									
N3BU	23,998	142	38	16	K9CT	133,008	407	55	47	K9CT	133,008	407	55	47	HL5YI	23,030	106	40	7	*ES4NJ	81,263	337	0	47																									
K2PI	23,144	229	40	16	*K9MMS	64,987	488	55	16	W89N	244,170	1074	56	34	7Z1S1	486,760	661	18	58	ES1BH	28,288	165	0	34																									
W4VIC	21,735	179	33	12	*K9JUS	79,488	532	54	10	K9CT	133,008	407	55	47	<b>North America</b>										Saudi Arabia	486,760	661	18	58																				
W4GO	19,943	132	32	17	WT2P	73,138	557	52	6	EX2X	865,920	1245	58	62	Mexico	865,920	1245	58	62	United Arab Emirates	442,728	659	7	65																									
*K4KR	18,630	173	39	6	KE8L	57,938	429	54	5	N4PZ	249,147	371	46	47	Puerto Rico	249,147	371	46	47	A61EK	442,728	659	7	65																									
N3KN	18,584	164	40	6	N2BJ	56,974	399	55	6	WP3X	192,812	413	48	38	AE5CA	5,817	34	0	21	A65CA	5,817	34	0	21																									
*K1SN	16,343	88	52	7	*K9PG	49,270	300	52	13	<b>AFRICA</b>										OH8R	378,576	783	15	73																									
*NJ4Q	8,330	103	32	2	W91Y	39,760	307	50	6	Canary Islands	14,014	57	0	26	E0E2S	329,034	694	18	69	AE5CA	5,817	34	0	21																									
Texas																									0E2CLM	131,560	473	1	54	0E2LNU	99,680	345	1	55	Ceuta & Melilla	161,597	310	2	51	0E2CSP	99,680	345	1	55					
W5ZN	261,324	951	58	44	AC8S	4,352	58	30	2	E0E1SU	31,878	149	0	42	0E2CSC	99,680	345	1	55	0E2U01	21,846	131	0	33																									
Louisiana																									0E2CAL	13,760	60	0	43	0E2U02	21,846	131	0	33	Madeira Islands	2,452,908	1737	56	86	0E2U03	13,760	60	0	43	RMT7M	69,212	598	0	58
KASM	43,974	288	50	13	AI9T	29,425	220	48	7	ASIA	486,034	748	1	72	0E2U04	13,760	60	0	43	CUBAS	16,380	61	10	29																									
*K1DW	29,812	197	45	13	N9LU	24,510	138	43	14	Asianic Russia	486,034	748	1	72	0E2U05	13,760	60	0	43	EU4E	577,343	1208	17	72																									
AA5AU	30	5	3	0	W9YK	23,255	216	45	2	R9CW	476,997	780	0	69	0E2U06	13,760	60	0	43	EW8R	339,520	796	14	66																									
Arkansas																									0E2U07	13,760	60	0	43	0E2U08	13,760	60	0	43	U18J	263,511	524	0	57	0E2U09	13,760	60	0	43	EU3A	196,218	566	3	63
K5M	29,812	197	45	13	N9LQ	24,510	138	43	14	U19U	95,304	479	54	22	0E2U10	13,760	60	0	43	EU3B	159,952	600	0	52																									
AA5AU	30	5	3	0	W9YK	23,255	216	45	2	R9CW	476,997	780	0	69	*EU8A	126,115	434	0	55	EU3C	159,952	600	0	52																									
Oklahoma																									0E2U11	13,760	60	0	43	0E2U12	13,760	60	0	43	U18J	263,511	524	0	57	EU4T	102,030	338	2	55	EU3AA	81,927	302	1	56
WSTM	141,150	801	56	19	AC9S	4,352	58	30	2	0E2U13	13,760	60	0	43	U19U	95,304	479	54	22	EU4A	86,229	229	3	64																									
K5UV	49,410	355	52	9	*K9PY	3,450	63	25	0	0E2U14	13,760	60	0	43	W9DA	69,720	399	54	16	EU4B	159,952	600	0	52																									
NS5UM	38,752	304	50	6	*W9LEJ	3,381	73	21	0	0E2U15	13,760	60	0	43	KDDEE	50,932	289	52	16	EU4C	159,952	600	0	52																									
Louisiana																									0E2U16	13,760	60	0	43	0E2U17	13,760	60	0	43	W9DA	69,720	399	54	16	*W9TC	43,520	251	52	16	EU4D	159,952	600	0	52
KASM	43,974	288	50	13	*K9AGS	9,139	101	35	2	0E2U18	13,760	60	0	43	W9DA	69,720	399	54	16	EU4E	159,952	600	0	52																									
*K1DW	29,812	197	45	13	KJ9X	9,000	110	35	1	0E2U19	13,760	60	0	43	W9DA	69,720	399	54	16	EU4F	159,952	600	0	52																									
AA5AU	30	5	3	0	<b>INDIANA</b>										0E2U20	13,760	60	0	43	W9DA	69,720	399	54	16	EU4G	159,952	600	0	52																				
WSTM	141,150	801	56	19	W9IU	251,193	1001	56	37	0E2U21	13,760	60	0	43	0E2U21	13,760	60	0	43	W9DA	69,720	399	54	16																									
K5UV	49,410	355	52	9	K9NW	215,745	783	56	39	0E2U22	13,760	60	0	43	0E2U22	13,760	60	0	43	W9DA	69,720	399	54	16																									
NS5UM	38,752	304	50	6	KKOV	102,400	477	54	26	0E2U23	13,760	60	0	43	0E2U23	13,760	60	0	43	W9DA	69,720	399	54	16																									
Texas																									0E2U24	13,760	60	0	43	0E2U24	13,760	60	0	43	U18J	263,511	524	0	57	0E2U24	13,760	60	0	43	W9DA	69,720	399	54	16
K5NA	187,052	646	55	46	W9IU	251,193	1001	56	37	0E2U25	13,760	60	0	43	R9CA	50,660	175	0	34	0E2U25	13,760	60	0	43																									
W5PR	135,608	540	57	35	K9NW	215,745	783	56	39	0E2U26	13,760	60	0	43	U18J	263,511	524	0	57	0E2U26	13,760	60	0	43																									
K5RY	113,460	397	57	36	KKOV	102,400	477	54	26	0E2U27	13,760	60	0	43	U19U	95,304	479	54	22	0E2U27	13,760	60	0	43																									
K5BG	64,396	384	52	16	W9IU	251,193	1001	56	37	0E2U28	13,760	60	0	43	W9DA	69,720	399	54	16	0E2U28	13,760	60	0	43																									
W5VX	61,685	396	50	15	W9IU	251,193	1001	56	37	0E2U29	13,760	60	0	43	W9DA	69,720	399	54	16	0E2U29	13,760	60	0	43																									
NS5J	47,872	305	51	13	K9NW	215,745	783	56	39	0E2U30	13,760	60	0	43	W9DA	69,720																																	

*UA3DUJ	4,440	45	0	20
RG6L	3,648	52	0	18
RW4NN	3,006	20	0	16
*RW3XZ	2,550	38	0	15
*UAACE	1,496	52	0	15
*R2IN	1,144	19	0	13
*RADBT	910	16	0	10
R4LC	672	21	8	8
RX3Q	540	8	0	9
*R6ACB	540	9	0	9
RN3GQ	420	7	0	7
*RASVE	120	8	0	4
*RM3TO	90	7	0	3
RJ3FM	10	1	0	1
RU6B	5	1	0	1

**Europan Turkey**  
 \*TATL 7,175 36 0 35  
 \*TAICM 2,700 27 0 20

**Finland**

OG7A	557,650	1085	15	80
OG4T	291,984	626	14	70
OH30J	178,640	597	2	66
OH3JR	126,451	325	6	55
OG6N	117,288	427	2	52
OH8WV	116,800	460	0	50
*OG7N	115,618	410	54	84
OH2B0	12,814	170	14	64
OH3FM	68,948	301	0	44
OH2KI	52,664	149	4	45
OH7KBF	51,660	222	0	54
OG1D	50,592	193	0	50
OH3Z	16,940	67	1	44
*OH8WR	11,475	93	0	25
OH1XX	9,600	33	13	19
OH2IS	4,104	34	0	24
OH7MFO	2,400	49	0	12
*OHGHZ	270	7	0	10

**France**

FSPHW	101,436	216	15	64
F5NBX	36,848	150	2	45
*F4VSO	31,746	155	1	38
*F6IIT	4,314	44	0	19
*F5DRD	1,620	26	0	12

**Germany**

DL6FL	1,030,710	1451	47	82
DLKWB	634,176	1147	30	78
DJ0MR	602,869	1210	25	76
DL3WV	496,980	1015	22	77
DR1D	490,248	998	28	71
DL7URH	486,115	1028	24	71
DK2OY	442,597	1021	22	67
DL7ON	420,810	1077	13	70
DL6DH	405,848	789	25	72
DL6MHV	369,686	843	21	67
DL3QDT	333,477	864	16	65
DF6QV	327,518	802	18	65
DJ5AN	320,164	660	26	68
DL5LYM	292,908	717	18	66
DL2ME	274,772	793	15	58
DL8UAT	257,992	809	5	63
DL4LAM	250,920	531	18	67
DJ5MW	248,200	714	11	62
DL5JS	236,448	699	11	61
DF5EG	234,780	598	17	61
DK2CC	208,707	596	12	61
DL1NKS	206,682	583	15	59
DK2LO	197,903	557	12	61
DJ9AO	197,210	495	18	64
DJ5I	195,972	440	20	64
DL1RTL	179,520	564	10	56
DF4XX	163,928	547	13	49
DL4HRM	162,860	522	11	57
DL5GAC	157,148	489	10	58
DL9GTB	156,978	603	0	50
DL1NEC	153,420	555	15	59
DL3DW	145,055	470	6	61
DL7AT	144,951	542	3	54
DL8MKG	144,005	316	18	65
DK3GI	141,624	473	6	57
DF9LJ	137,752	420	15	52
DK3UA	135,825	310	15	60
DK1KC	133,280	525	2	54
DK8ZZ	124,785	468	2	57
DH9CHU	124,264	491	1	55
*DLS5FC	121,828	489		
DF1LON	118,767	441	5	54
DL8QS	115,168	402	5	54
DM5TI	114,391	285	15	58
DJ8EW	112,840	479	0	62
DF4PD	112,109	320	8	53
DL5ANT	110,682	345	4	62
DJ2BC	110,580	394	0	60
DK1AX	104,424	400	7	50
DK2BJ	103,400	397	0	56
DL1ASA	95,831	325	11	57
*DK5TX	92,718	378	1	53
DL6NO	90,750	413	0	50
DL2A	89,980	364	5	50
DL5ST	87,966	358	2	52
*DM4MN	85,550	319	4	54
DL8HO	85,374	252	4	58
*DJ4MH	83,856	395	0	48
DF2PG	82,944	318	3	51
*DL5AH	82,892	422	5	41
*DL1TS	80,150	376	0	48
*DL1HT	77,127	384	0	47
*DM5JEN	75,394	370	0	46
*DL3TU	74,989	249	10	49
DQ1200ASP	72,971	399	0	43
*DD2ML	69,524	296	0	52
DL7YS	69,376	199	11	53
DK1FW	67,270	203	7	55
*DB0LE	66,576	317	0	48
*DL1DW	65,340	334	0	44
*DJ9MH	64,108	307		
DK5WO	62,307	333	0	43
*DJ1YFK	61,875	318	0	45
DH8BQA	61,655	230	2	53
DL1BA	60,123	250	2	47
DL4HG	59,829	272	0	49
DLHNE	57,771	166	10	53
DJ1AA	56,724	198	3	55
*DD4DX	54,192	253	0	48
DK1TW	52,331	275	0	43
DM3XRF	52,136	231	0	49

*DL5XAT	51,700	265	0	44
*DJ0MY	50,400	236	0	48
*DJ3JD	50,078	205	1	48
*DF7RG	49,802	304	0	37
*DK3AX	49,303	223	5	42
DJ60I	46,228	174	0	52
DL5RDP	45,968	179	0	52
*DL3AMI	44,460	272	0	38
*DJ1XT	42,284	201	0	44
*DL1RRN	38,220	206	0	44
DJ8IF	37,180	128	3	52
*DL8DWW	36,040	201	0	40
DL1WM	34,153	141	2	47
*DJ1MM	33,150	189	0	39
*DF8XC	31,476	154	1	42
*DK5WN	30,599	188	0	37
DL1GME	29,250	162	0	39
*DK3WE	27,094	120	2	44
*DF1LX	20,880	124	0	40
*DD7GW	20,823	155	0	35
*D04D0	17,045	99	0	35
*DL1D0AW	16,872	91	0	37
DC2VE	15,840	116	0	33
DK5AD	15,444	103	3	30
DF9VJ	14,181	117	0	29
*DK4YJ	13,552	119	0	28
DL9NDV	12,321	67	0	37
*DL4LM	12,000	108	0	25
*D08ST	11,804	100	0	26
*DJ6GZ	11,550	78	0	20
*DM5DX	10,933	75	0	29
DL1MDY	7,825	67	0	25
*DL9NEI	5,580	66	0	20
DL6MFK	5,400	40	0	24
*DG1HXJ	4,620	49	0	21
DL4NER	4,452	45	0	21
*DG7RO	3,315	48	0	17
*DL7JUN	2,844	33	0	18
DL2VU	2,835	26	0	21
DD0VS	2,160	42	0	12
*DL4LT	1,430	32	0	11
*DJ5LA	135	5	0	5
*D05M	27	3	0	3

<b>Greece</b>	128,782	431	0	54
SV2JAD	32,708	166	0	37
SV1JG	30,408	134	0	42
SV2BWX	3,173	29	0	19

**Hungary**

HA7I	514,969	1057	16	75
HA8BNN	513,331	1068	13	79
HA5DZ	290,959	651	18	61
HA7UR	204,915	700	0	57
*HA6B	175,728	624	0	56
*HA4C	65,772	316	0	42
*HA5PT	32,554	159	0	41
*HA8PK	21,630	126	0	35
*HA7MS	3,300	26	0	25

**Ireland**

*EI2FG	4,602	34	0	26
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**Italy**

IK0YUT	675,688	1173	27	77
I2WJL	326,772	714	20	67
I3JW	248,760	672	12	60
IK3ORD	216,890	494	17	65
*IK4DCX	197,184	614	4	60
IK0JUC	141,777	473	3	56
IK0JND	126,344	358	11	57
I1JTO	94,870	363	1	57
I2DVL	94,445	286	6	59
I25NFD	92,366	274	7	58
*I3V3YT	88,344	327	0	54
IK2ANI	75,205	204	10	55
IW3SSA	69,276	160	6	63
I2BVD	59,254	217	0	53
IW1QIF	51,708	150	6	56
IK0BXX	41,175	121	1	60
*I3BGA	37,200	163	0	48
IK2TDM	27,864	89	0	56
*I3FPX	14,084	110	0	28
*I3SIC	13,920	95	0	30
IK8BIZ	4,220	40	0	20
*I3GNP	3,480	24	0	14
*I3AIR	1,677	27	0	23
I2BIS	847	13	0	11
IK8POF	440	9	0	8

**Kaliningrad**

UA2FZ	845,250	1428	27	78
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**Latvia**

YL1S	527,772	1183	17	67
YL3FT	438,572	993	14	69
YL2VW	432,841	1045	12	67
YL2BT	312,255	720	11	70
YL1YX	283,874	622	15	63
YL2GM	199,013	529	8	63
YL3BJ	156,586	512	4	65
YL2TD	151,592	520	2	54
YL2AO	114,016	392	1	54
*YL2GP	103,152	358	2	54
*YL2PP	15,618	75	0	38

**Lithuania**

LY7Z	728,210	1286	24	79
LY2MM	626,980	1276	18	78
LY2K	438,300	1128	12	63
*LY4ZZ	403,018	1010	10	67
LY7M	396,491	895	9	74
LY4A	337,605	919	6	65
LY5R	224,700	608	5	65
LY5O	222,456	714	4	58
LY2KF	222,072	772	1	56
*LY3B	220,109	823	0	53
LY2BK	207,782	768	0	54
LY2X	133,900	530	1	49
LY3X	128,161	408	3	58
*LY2DX	110,600	445	0	50
LY2FN	97,570	348	0	55
LY2OU	27,600	105	3	47
*LY2NY	7,084	71	0	22
*LY2CX	836	17	0	11

**Luxembourg**

LX7I	1,133,713	1639	38	81
*LX1ER	69,357	209	4	57

<b>Netherlands</b>	538,560	978	28	74
PE3T	457,140	823	27	68
*PC3T	326,586	787	17	65
PA0B	298,420	628	18	68
PA5KT	247,009	657	11	67
PA3AAV	158,688	399	15	57
PA0G	108,014	400	7	46
PG3M	73,540	247	3	53
*PA7LV	48,672	193	6	42
PA0WRS	48,492	157	9	45
PF5X	31,356	112	1	51
PB7Z	29,250	150	0	39
PA1T	24,026	111	5	36
PA0DAT	21,747	136	0	33
*PH0AS	16,020	90	1	35
PA8INA	12,145	48	12	23
PA5N	12,144	108	0	23
PA3GRM	11,640	100	0	24
*PE1HW	3,087	30	0	21
*PA0RHA	992	26	0	8
*PG2AA	792	15	0	11
PA1TT	1	-1	0	0

**Northern Ireland**  
 MI/320X 794,903 1247 38 69

**Norway**  
 LA3MHA 175,100 485 4 64  
 LA7JO 101,848 332 2 56  
 LC5K 91,025

NORTH AMERICA

Table with columns for call sign, country, and numbers. Includes Alaska, Bahamas, Cuba, Africa, and Asia sections.

AFRICA

Table for Africa section: Africa Italy (808,170)

ASIA

Table for Asia section: Asiatic Russia, Israel, Japan, Mongolia, Thailand, European Islands, Bulgaria, Corsica, Croatia, Czech Republic, England, European Russia, Finland, Greece.

Hungary

Table for Hungary: HG8DX, HG7T, HG5A

Ireland

Table for Ireland: EI0R

Italy

Table for Italy: IK2YCW, IQ3RK, IQ3ME, IQ5ZP

Kaliningrad

Table for Kaliningrad: RW2F

Lithuania

Table for Lithuania: LY2XW, LY2J, LY40

Macedonia

Table for Macedonia: Z3B

Netherlands

Table for Netherlands: PA8AD, PC2L

Poland

Table for Poland: SN8B, SN2B, SP8PAI, SN9Z, SP5ZCF

Portugal

Table for Portugal: CR5K

Republic of Kosovo

Table for Republic of Kosovo: Z66X

Romania

Table for Romania: YP5A, Y04KAK

Serbia

Table for Serbia: YT9A

Slovak Republic

Table for Slovak Republic: OM8M, OM2Y, OM6A, OM4Q, DM3KKF

Slovenia

Table for Slovenia: S50W, S59C, S53EA, S52ZW

Spain

Table for Spain: EF5Y

Sweden

Table for Sweden: SK3W, SJOX, SC07DX

Switzerland

Table for Switzerland: HB9CA, HB9KG

Ukraine

Table for Ukraine: U22M, U23A, U21I, U24E, UR4RWW, UW4UJ, UT7E

Hawaii

Table for Hawaii: KH6LC

Indonesia

Table for Indonesia: YB3ZBD

Philippines

Table for Philippines: 4D2XX

Curacao

Table for Curacao: PJ4P, PY2NA, PJ2T

CHECK LOGS

AC20C, CT1EKD, D220C, DK3PM, DK5DC, DK7MD, DL20XA, DL5CL, DL6VA, DL6UD, D09SR, E73FDE, E77AR,EA1AAA, EA3NP, EA6EE, EA7TG, E77CC, ES5EP, EW6F, GM4AF, HG2DX, IK50H, IV3AZV, IZ3GN, IZ3BL, JAE5XW, JAE5FNX, JH1BNC, J3BFG, K0KX, W1FX, KSOT, K0BSCA, L41U, LAFJA, LY2BNL, LZ2JE, M1ERL, OK1FM, OK2PAY, OM3RM, QM3SX, OM5CD, OM5XX, PA0VAJ, PA7F, PF7DKW, R2PA, R5DC, R6YV, R7GX, R7KW, R8MB, R9AE, RA0QD, RA6DY, RA9DZ, RL3F, RM2D, RV3LO, RV9UDD, RW3LL, RW9SW, RW9WT, RZ3DV, SM5ENX, SM7N, SP5XO, SP6TR, SP7ICE, SP7FM, SP8BK, SV1BJW, SV1DPI, SV3RF, SV9DJ, TF3SG, TK4RB, UA1AIR, UA4S, UA6J, UA9CN, UG3CX, UR3CRD, UR3CS, UR5OHL, UR7EM, US9TA, US1CT, US3WV, US4IDY, US5CAA, UT7LW, UR5UN, VK7CW, VU2PTT, W3QT, W3SA, Y02LLL, Y08SS, Y08TT, Y09CWY, YR2V

SSB RESULTS

SINGLE OPERATOR

NORTH AMERICA UNITED STATES

CONNECTICUT

Table for Connecticut: K1KJ, KAJ1, \*KMR, \*K1MJM, \*W1ZFG, K1BUB, \*KM4FOS

MAINE

Table for Maine: N1FR

MASSACHUSETTS

Table for Massachusetts: W1EOD, KSZD, AA10, KK1W, \*N1YL, W1AST, \*W1WH

NEW HAMPSHIRE

Table for New Hampshire: AF1T, \*W1LJD, K1AR, KA10B0, K1RO, \*K1Z0, \*N11MW

RHODE ISLAND

Table for Rhode Island: W1XX, \*N1EYE

VERMONT

Table for Vermont: \*KC1SS, K1GMM, \*N2HX

NEW JERSEY

Table for New Jersey: N2ED, \*N2HMM, N2NC, NZNT, \*W2ALY, W2TT, \*W3PR, \*KE2D, \*KC2WUF, \*W2JEK, \*N21VN, \*N2CJ, \*KC2G, \*KBSDF

NEW YORK

Table for New York: WF2W, WU2X, WA2CP, WSSM, \*AC2RL, \*WB2LD, N2JJ, \*WB2NFL, NS2N, \*N2MTG, \*K2SI

DELAWARE

Table for Delaware: \*KS3D

DISTRICT OF COLUMBIA

Table for District of Columbia: 4U1WB, \*KE3X

MARYLAND

Table for Maryland: K3Z0, \*NS2T, \*W3MBC, K1BZ, N3DUE, \*W3MR, AA3S, \*WK3A, \*NC3Y, \*W3RC0, KD4IZ, K4GJUN, \*W3MMM

PHILIPPINES

Table for Philippines: W3BGN, W3TS, \*AJ3T, W3SO, NG3J, \*K3UA, \*N3XZ, \*N3JJ, \*W3SC, K3WJV, \*KD3HN, \*KN3A, N3LT, \*K3URT, \*AJ30, KA3KSP

PENNSYLVANIA

Table for Pennsylvania: W3BGN, W3TS, \*AJ3T, W3SO, NG3J, \*K3UA, \*N3XZ, \*N3JJ, \*W3SC, K3WJV, \*KD3HN, \*KN3A, N3LT, \*K3URT, \*AJ30, KA3KSP

ALABAMA

Table for Alabama: \*AJ6T

FLORIDA

Table for Florida: \*KP4KE/W4, K9QLL, AA4CS, K1V3, WX4US, \*AA4NP, WBD0AD, \*KN4DXT, \*KA3EHL

MISSISSIPPI

Table for Mississippi: \*KBRGI, \*K210

GEORGIA

Table for Georgia: KUBE, K4BAI, K4NV, \*W4DD, \*K4MHL, \*K4MF, \*K4BDK, \*N4BJ

KENTUCKY

Table for Kentucky: K4WV, N4ZY, W4KP, \*K4AOM, \*AC4YD

NORTH CAROLINA

Table for North Carolina: NG4C, K4FX, \*K4ARV, W1R6P, \*N4R4Y, \*N4NT0, K4KAY, \*K4CZV

SOUTH CAROLINA

Table for South Carolina: \*W4ALDU, K70M, \*KG4IG, W40DD, W4SS, \*K4MRK, NJ4F, \*K40CB

TENNESSEE

Table for Tennessee: K4RO, W4YDY, AC4G, \*K9DOR, \*K4FR, \*K4KMG

VIRGINIA

Table for Virginia: K3ZM, \*W4ZAO, K4CGY, N4MM, W49TC, \*K04LA, N4FC, N3JT, \*W4I, \*K4F0, K4YCR, \*AE4TH, \*K4MI, KE4S, K45F, W2YE, \*K4FC, \*W4KFO, N4MR, AD4TJ, \*KG4WJ, \*K82LOZ

ARKANSAS

Table for Arkansas: W5R, W5KI

LOUISIANA

Table for Louisiana: \*K8S, \*AD5VC

MISSISSIPPI

Table for Mississippi: \*KF4EWO, KF5BA, \*K5XU

NEW MEXICO

Table for New Mexico: W05COV, K80Z, K5TA, \*W05CSK, N5UM, \*N0LD

OKLAHOMA

Table for Oklahoma: W05CSK, N5UM, \*N0LD

TEXAS

Table for Texas: K5RX, WD5K, AA5AM, KJ5MA, \*NWSQ, K5TXM, W5R, \*K5DDV, \*NWSI, KF5NRS

CALIFORNIA

Table for California: N1J6P, \*N6AA, N6RO, \*KG6AO, W6RKC, \*K6BOR, W6RO, KWS5, \*NL6L, \*N6VI, W6JR, \*K6GBXW, \*N6U6, \*K7XE, \*W6JK, \*N6OI, \*N0ED

ARIZONA

Table for Arizona: N6BT, N7RK, N7GP, N6KLS, \*K7HR

IDAHO

Table for Idaho: W7MEM, \*W7TX

MONTANA

Table for Montana: N9RV, KS7T, \*K7QA

NEVADA

Table for Nevada: W6GW, KM6CQ

OREGON

Table for Oregon: K7RAT

UTAH

Table for Utah: \*K7MO, \*K7PDW

WASHINGTON

Table for Washington: N7AU, K7CW, K7UJ, \*K9VO, \*K7PBM, \*N7ZU, \*N7RR, \*K7JG, K7DG, \*K7JG, \*K7GDB

WYOMING

Table for Wyoming: W8TS, \*WYTKY

MICHIGAN

Table for Michigan: N4V, \*W8CO, W8HCV, \*N8TL, K8GVK, \*K7DR, \*K8MJZ, \*N8HKU

OHIO

Table for Ohio: K8RR, W8MET, \*N8KT, N8IL, \*K8MJH, \*K8BVA, \*W8BJU, \*K8SVT, \*AB80U, \*A8BDC, W8HKM, \*W8KNO, W8WTS, \*A8B5W, \*K8BMQ, \*K4V4Z, \*A8C, \*W8BWUA, \*W8RR, \*W8X3, \*W8XY

WEST VIRGINIA

Table for West Virginia: N8II, \*K8GQ, W8XAN

ILLINOIS

Table for Illinois: K9ZO, \*W9RL, K9CO, \*N9LV, \*W9J, W9Z, W7ZP, N9JR, \*W9BHF, \*K9PG, K9FO, K9CT, \*W88ZK, \*N9TF

INDIANA

Table for Indiana: W9N0, K9LA, \*K90Z1, \*K8VLG, \*W8N00, W9RE, \*W9IZ, \*K9G5Y

WISCONSIN

Table for Wisconsin: \*W9SU, N9GH, \*W9AV, \*W98WP, K9J, \*W9TTH, \*K9MDR, W9SD

COLORADO

Table for Colorado: K80B, K8UK, \*AF0E, \*K0MR, \*N0TZ, \*W8XAL, \*K8KX

IOWA

Table for Iowa: K8SRL

AD0H	10,320	104	41	2	*K10E0	1,273	29	19	0	*KE0TTC	816	21	17	0																																																																																					
<b>KANSAS</b>																																																																																																			
W0NO	106,151	617	55	16	ACBR	25,917	201	46	7	KB0EZS	6,630	79	36	3	N0YET	3,927	55	32	1	AD0AB	3,240	51	28	2	N0TEK	1,806	37	21	0																																																																						
<b>MINNESOTA</b>																																																																																																			
K0TT	167,360	872	56	24	*N0BC	31,323	255	51	2	K10F	29,547	258	47	2	*W0SEI	8,400	82	39	3	*N0HDR	5,967	66	38	1	K9WN	2,214	32	25	2																																																																						
<b>MISSOURI</b>																																																																																																			
*AB00	8,323	91	39	2	KB0CZQ	5,355	69	32	3	*KB0CN	1,278	31	18	0																																																																																					
<b>NEBRASKA</b>																																																																																																			
WB9QAF	13,728	144	43	1	*KE5RX	7,740	78	41	2	*KB0ARZ	3,161	50	29	0																																																																																					
<b>CANADA</b>																																																																																																			
<b>NEW BRUNSWICK</b>																																																																																																			
VEBA	11,900	69	28	7	*VE9ML	7,106	67	19	3	*VE9RLW	1,400	22	13	1																																																																																					
<b>QUEBEC</b>																																																																																																			
VE2FXL	40,911	224	35	4	*VA2BN	27,786	182	30	3	*VE2HAY	6,720	58	23	1	*VE2GT	680	16	10	0																																																																																
<b>ONTARIO</b>																																																																																																			
VE3DZ	304,113	664	54	35	VE3PN	231,312	587	54	25	VE3CKO	210,160	524	56	24	VE3MGY	171,086	534	54	12	VE3KZ	81,339	303	50	7	VA3AC	78,120	266	49	11	VE3KP	42,930	167	47	6	VE3WG	26,250	134	39	3	VE3VN	18,480	97	34	6	VE3CNA	15,640	98	32	2	VA3MW	10,410	71	28	2	VE3MT	8,910	72	27	0	VE3KKQ	8,370	60	29	1	VA3RKM	6,510	68	21	0	VE3ST	5,560	58	20	0	VE3QEE	5,520	49	24	0	VA3EC	4,800	51	20	0	VE3XNS	1,456	23	13	0	VA3FN	1,222	20	13	0	VE3BR	670	13	9	1
<b>MANITOBA</b>																																																																																																			
*VE4TV	34,528	142	51	1																																																																																															
<b>SASKATCHEWAN</b>																																																																																																			
*VE5DLC	333	11	9	0																																																																																															
<b>ALBERTA</b>																																																																																																			
VE6BBP	117,120	398	51	10																																																																																															
<b>BRITISH COLUMBIA</b>																																																																																																			
VE7NY	18,438	91	35	7																																																																																															
<b>NORTH AMERICA</b>																																																																																																			
<b>Cayman Islands</b>																																																																																																			
ZF9CW	337,269	598	52	45	ZF2AM	324,412	582	50	51																																																																																										
<b>Costa Rica</b>																																																																																																			
T1ZCC	2,940	28	14	6																																																																																															
<b>Mexico</b>																																																																																																			
XE2S	45,084	175	44	7	XE1N4DMH	11,556	63	28	8	XE1H	3,432	31	17	5																																																																																					
<b>Puerto Rico</b>																																																																																																			
*WP3UX	5,200	35	15	11																																																																																															
<b>AFRICA</b>																																																																																																			
<b>Canary Islands</b>																																																																																																			
E08W	144,075	195	31	44	*EB8AYA	4,120	24	0	20																																																																																										
<b>ASIA</b>																																																																																																			
<b>Asiatic Russia</b>																																																																																																			
RT9S	53,162	152	0	38	UA9BA	34,560	118	0	32	*RA9A	25,218	100	0	27	RUBCC	16,653	87	0	21	RABSDT	4,952	44	0	12	*UA0ACG	1,024	20	0	8	*R0MB	912	20	0	6	*R0LMO	1	0	0	1																																																												
<b>Asiatic Turkey</b>																																																																																																			
*TA3LHH	15,755	74	0	23	*TA7TC	4,340	31	0	14	*TA2LP	4,063	26	0	17	*TA9J	2,079	21	0	11	*TA4RC	66	3	0	3																																																																											
<b>Israel</b>																																																																																																			
4Z5LY	46,655	137	0	35	4X1M	18,144	71	0	27																																																																																										
<b>Saudi Arabia</b>																																																																																																			
*HZ1TL	1,170	13	0	10																																																																																															
<b>EUROPE</b>																																																																																																			
<b>Austria</b>																																																																																																			
OE1TKW	58,032	230	5	43																																																																																															

OE1HHB	43,680	219	0	40	*OE6HWF	11,205	83	0	27	*OE3TWA	4,320	48	0	18																																																																																																																																																						
<b>Azores</b>																																																																																																																																																																				
CUJ4X	353,662	520	40	57																																																																																																																																																																
<b>Balearic Islands</b>																																																																																																																																																																				
*EA6AMM	1,380	23	0	12																																																																																																																																																																
<b>Belarus</b>																																																																																																																																																																				
EW6W	324,000	710	24	57	EW8R	83,181	311	4	47	EU4A	38,318	223	0	34	*EUSA	9,330	63	0	30	*EUGAA	45	3	0	3																																																																																																																																												
<b>Belgium</b>																																																																																																																																																																				
ON7HLU	21,148	124	0	34	*ON6BC	7,797	69	0	23																																																																																																																																																											
<b>Bosnia-Herzegovina</b>																																																																																																																																																																				
*E740	173,250	530	9	54																																																																																																																																																																
<b>Bulgaria</b>																																																																																																																																																																				
*LZ1YE	10,636	74	0	28																																																																																																																																																																
<b>Croatia</b>																																																																																																																																																																				
*9A6ZZ	35,000	197	5	10	*9ABTT	2,000	25	0	16	*9ASV	960	16	0	12																																																																																																																																																						
<b>Czech Republic</b>																																																																																																																																																																				
*OK1LD	87,488	287	9	39	*OK1DP	49,296	266	0	39	*OK2BR	28,254	177	0	34	*OK2TS	23,200	154	0	32	OK2IUH	19,065	131	0	31	*OK1BJ	16,875	134	0	27	*OK1FU	9,864	92	0	24	*OK6AB	828	19	0	9	*OK2SGY	156	7	0	6	*OK2ABU	110	5	0	5																																																																																																																			
<b>Denmark</b>																																																																																																																																																																				
*OZANA	37,152	206	1	35	OU2V	6,490	59	0	22																																																																																																																																																											
<b>England</b>																																																																																																																																																																				
G50	100,260	322	11	49	*G2X	48,624	196	6	42	G4AFJ	29,120	143	5	35	*G00IC	11,658	61	0	29	*M0MCV	10,676	64	0	34	*M0HHG	1,620	30	0	12	*G0VPE	1,092	18	0	13	G1VWC	486	12	0	9																																																																																																																													
<b>Estonia</b>																																																																																																																																																																				
ES5RW	333,760	758	22	58	ES3BM	12,450	101	1	24	*ES6RMR	2,640	37	0	15																																																																																																																																																						
<b>European Russia</b>																																																																																																																																																																				
RW1F	258,712	669	15	58	RZ3MM	47,150	239	1	40	RA1TDP	43,880	232	1	39	*RK6AQP	39,368	208	2	36	RC5Z	36,176	195	0	38	*RW7M	35,820	156	3	42	*UA1CUR	27,900	158	0	36	*UA3BL	23,661	148	0	33	RC2SB	20,545	113	0	35	*RK3E	18,576	147	0	27	*R7NA	17,068	96	2	32	*R0RUT	9,800	82	0	25	*RV1CB	8,154	63	0	27	RM4HZ	6,480	55	0	24	*RD3DS	5,712	59	0	21	*R3RAE	4,540	45	0	20	*UA3Z	2,376	38	0	12	*RU7J	1,331	26	0	11	*UA3U	76	7	0	2																																																																						
<b>European Turkey</b>																																																																																																																																																																				
*TA1CM	2,466	27	1	17																																																																																																																																																																
<b>Finland</b>																																																																																																																																																																				
*OH6ECM	28,347	171	0	33	*OH1HS	710	16	0	10																																																																																																																																																											
<b>France</b>																																																																																																																																																																				
*TM6M	123,954	333	21	47	*FIGZV	3,660	35	3	17	*F4EPP	1,272	23	0	12																																																																																																																																																						
<b>Germany</b>																																																																																																																																																																				
DJ7WW	272,571	627	29	58	*DL0NG	55,169	309	2	41	DL4RCE	49,960	314	0	40	*DP3P	44,666	218	2	44	*DL4ZA	40,740	230	5	37	*DG5MLA	39,606	235	0	41	*DM5SB	39,160	227	0	40	*DL4PT	32,553	197	2	37	*D0HRJ	31,863	195	0	39	DF5RF	31,816	178	0	41	*DH2IF	31,790	238	0	44	*DH1TST	30,415	220	0	35	DH6BH	27,470	146	3	38	*DL8DSL	27,144	163	2	37	DM2RM	27,090	186	0	35	*DK1KC	26,075	174	2	33	DG0LFG	25,133	139	0	41	*DF1TB	24,840	132	7	35	*DL2TOS	23,905	172	0	35	DJ7QJ	23,791	146	0	37	*DK0BM	23,220	165	0	36	*DL8ZU	19,050	160	0	30	DL5AWE	15,779	121	0	31	*DG5MEX	14,970	113	0	30	DK1NO	14,130	112	0	30	*DB8AH	13,764	108	0	31	*D01UKR	13,717	126	0	29	*DH6GK	12,069	111	0	27	*DK0PX	12,068	106	0	29	DL1DTL	11,900	100	0	28	*DK0SU	11,745	99	0	29	DK0SU	11,745	99	0	28	*DL7UGN	11,583	96	0	27

*DG1FK	11,256	102	0	28	DL19AC	11,232	105	0	27	DL6HBQ	11,097	102	0	26	*DJ1WF	10,530	84	0	30	*DI7TNO	10,050	102	0	25	DM5RC	10,036	86	0	26	*DH4PSG	9,438	90	0	26	*DL5ALW	8,730	60	0	30	*DL0TY	8,100	75	0	25	*DK9IP	6,302	65	0	23	DL1SWT	5,865	57	0	23	DL7LX	5,825	49	0	25	DH8LAW	5,640	72	0	20	*DL8ZAJ	5,566	55	0	23	*DK1XT	5,543	59	0	23	DL1VWR	5,434	59	0	22	DM7C	5,290	51	0	23	*DL7UAI	5,214	57	0	22	*DL1ATZ	4,136	46	0	22	*DL2RCH	4,100	47	0	20	*DFR1	3,895	50	0	19	*D04WLL	3,520	40	0	20	*DL5SFC	3,500	22	5	15	*DL9HC	3,363	39	0	19	*DM2AWM	3,325	38	0	19	*D03KB	3,114	43	0	18	*DK1AUP	2,831	34	0	19	*DK4MDA	2,385	39	0	15	*D03SH	2,114	35	0	14	*DK2AJ	1,905	29	0	15	*DL3DRN	1,764	39	0	12	*DG1EAD	1,428	28	0	12	*D02CB	984	20	0	9	*D01MPR	549	14	0	9	*DL1RPR	528	18	0	6	*DL8RBP	378	18	0	6	*DG6MAY	72	6	0	3	*DH8DR	68	4	0	4	*DF7DR	60	4	0	3	*DL4LT	50	5	0	2
<b>Greece</b>																																																																																																																																																																																																							
*SV8IR	3,168	33	0	18	*SV2CUU	2,450	35	0	14																																																																																																																																																																																														
<b>Hungary</b>																																																																																																																																																																																																							
*HA1BC	35,208	197	0	36																																																																																																																																																																																																			
<b>Iceland</b>																																																																																																																																																																																																							
TF2LL	35,972	142	10	36																																																																																																																																																																																																			
<b>Ireland</b>																																																																																																																																																																																																							
*E1ENB	3,933	42	0	19																																																																																																																																																																																																			
<b>Italy</b>																																																																																																																																																																																																							
IS1VA	318,032	573	33	55	IK7YT	85,488	327	4	48	I20BVU	8,310	55	0	30	*I21LAY	7,590	72	0	22	*IW4CXH	1,080	24	0	9	I23COX	888	16	0	12	I28PP	400	8	0	10	*IK2IKW	162	6	0	6																																																																																																																																																																
<b>Latvia</b>																																																																																																																																																																																																							
*YL2GP	30,912	130	0	46	YL2PP	7,560	60	0	24	*YL3KW	6,210	69	0	18	*YL2EA	770	14	0	11																																																																																																																																																																																				
<b>Lithuania</b>																																																																																																																																																																																																							
LY4T	139,590	501	4	51	*LY4L	121,662	459	3	51	LY2VBV	104,569	386	6	47	*LY5VY	42,994	247	0	37	*LY5XC	29,790	213	0	30	*LY9A	29,202	194	0	31	*LY5CB	13,076	100	0	28	LY1D	10,896	95	0	24	LY500	7,464	67	0	24	*LY2DX	6,195	68	0	21	LY50	2,704	41	0	13	*LY3DA	1,807	32	0	16	LY1XM	10	5	0	1																																																																																																																																							
<b>Macedonia</b>																																																																																																																																																																																																							
*Z3BA	1,164	20	0	12																																																																																																																																																																																																			
<b>Malta</b>																																																																																																																																																																																																							
*9H3YY	16,500	109	0	30																																																																																																																																																																																																			
<b>Moldova</b>																																																																																																																																																																																																							
*ER5DX	7,350	37	0	35																																																																																																																																																																																																			
<b>Montenegro</b>																																																																																																																																																																																																							
*404A	24,480	142	0	34																																																																																																																																																																																																			
<b>Netherlands</b>																																																																																																																																																																																																							
*PE2JMR	47,424	247	1	38	*PA4EL	22,596	102	7	35	*PA3DTR	11,394	85	0	27	PA7WW	7,884	58	0	27	*PETRNU	6,120	50	0	24	*PA0TCA	3,330	37	0	18	*PA3JB	420	15	0	7																																																																																																																																																																					
<b>Northern Ireland</b>																																																																																																																																																																																																							
*MI7ER	46,395	199	7	38	*MI0M	1,515	22	0	15																																																																																																																																																																																														
<b>Norway</b>																																																																																																																																																																																																							
*LCST	20,608	149	0	28	LA9TY	14,364	76	4	32																																																																																																																																																																																														
<b>Poland</b>																																																																																																																																																																																																							
SO1DD	167,450	454	15	52	*SQ4JEN	74,284	312	4	45	*SQ2SAT</																																																																																																																																																																																													

State	QSO	Time	Score	Points
WA1DRQ	192	12	8	0
*W4FEB	126	9	6	0
*N1GK	112	8	7	0
<b>NEW HAMPSHIRE</b>				
K1RX	14,491	128	38	5
NF1O	12,520	118	32	8
NE1F	1,672	27	13	6
<b>RHODE ISLAND</b>				
W2DAN	124,254	564	55	26
NC1CC	58,344	307	45	21
*A1TT	26,542	241	40	6
<b>NEW JERSEY</b>				
N2MM	93,388	497	54	20
W02T	37,386	216	44	18
W2RQ	19,668	168	35	9
AB2DE	18,513	125	39	12
W2CG	11,895	119	33	6
N2VW	11,603	115	36	5
K2Z1	11,507	109	25	12
W4ZFZB	6,528	75	27	5
W2NKM	4,602	72	24	2
AB2E	3,174	57	21	2
<b>NEW YORK</b>				
KN2M	118,524	534	56	28
KE1H	77,256	392	46	26
W2GJW	35,400	215	45	15
N2SQW	35,282	190	42	17
*N1C1	15,884	135	36	8
*W4ZJOK	11,802	107	36	6
N2KA	4,620	53	25	5
*K2QMF	3,549	66	18	3
<b>DELAWARE</b>				
AA1K	117,126	489	54	27
K9RS	27,782	158	40	18
K3WI	16,744	152	39	7
<b>MARYLAND</b>				
W3LL	193,452	783	54	40
K3RA	67,827	363	47	22
N3OE	44,550	329	43	12
N3HEE	26,145	242	37	8
N3ALN	17,894	158	40	6
K3TN	16,873	132	39	8
N3AM	10,520	99	34	6
W3BW	10,140	90	30	9
W2GPS	10,138	103	28	9
W3OU	7,770	85	30	6
K3SX	6,840	59	32	6
*W3FA	4,966	75	25	3
W3GVX	4,234	60	27	2
W2CDO	2,225	40	23	2
N3XL	1,638	41	18	0
<b>PENNSYLVANIA</b>				
K3WW	193,533	732	56	37
NF3R	123,970	585	51	26
N3RS	46,314	227	39	23
W3KB	29,322	196	41	13
W3PV	27,040	220	47	5
WY3A	19,006	156	30	13
W0BR	15,200	114	41	9
N3ZA	13,440	97	31	11
W3FIZ	7,130	81	26	5
NO3U	6,177	99	29	0
K3MD	3,864	54	25	3
N3AD	3,275	55	24	1
*K7EFS	44	4	4	0
<b>ALABAMA</b>				
K4WI	25,251	144	40	17
W4RYW	2,862	50	26	1
<b>FLORIDA</b>				
W4G	143,726	430	53	41
<b>GEORGIA</b>				
K4UN	7,080	74	35	5
KK4WX	2,160	32	21	3
<b>KENTUCKY</b>				
W5MX	230,018	856	56	38
K4FT	11,252	59	48	10
AJ4A	11,029	101	33	8
<b>NORTH CAROLINA</b>				
W3GQ	2,136	33	20	4
<b>SOUTH CAROLINA</b>				
K4GE	87,204	368	50	28
K4YYL	39,128	206	52	15
<b>TENNESSEE</b>				
K4NX	129,560	676	56	23
K3JE	64,791	351	49	20
W4KW	38,064	259	51	10
AA4DD	35,208	159	50	22
<b>VIRGINIA</b>				
N4RV	183,870	727	57	33
K4XL	122,800	593	53	27
W4JVN	67,014	318	49	24
W3IP	51,534	297	46	17
W4NF	48,662	341	45	13
W4NG	20,648	114	45	13
K5VIP	7,099	97	28	3
*W4PM	2,784	52	22	2
W4VIC	2,668	52	20	3
<b>LOUISIANA</b>				
*AC5O	22,400	149	43	13
<b>TEXAS</b>				
W5PR	141,017	627	54	29
*W5LFD	12,088	188	40	6
W8TEV	5,358	54	34	4
*KE5LQ	1,640	32	19	1
*N5OFW	128	8	8	0
<b>CALIFORNIA</b>				
*K2GMY	750	32	9	1
<b>ARIZONA</b>				
NA7TB	45,816	250	51	18
K7HP	18,576	152	41	7
W7MRF	16,660	147	43	6
W0RIC	9,048	54	42	10
W47AN	8,480	77	33	7
N9NA	3,360	58	25	3
KB7AZ	1,349	31	18	1
<b>IDAHO</b>				
KG7CW	76,362	482	53	13
*W7BOB	3,174	63	23	0
<b>OREGON</b>				
K17M	48,321	342	49	10
K46BIM	13,373	131	38	5
<b>WASHINGTON</b>				
KK7PW	7,936	107	29	2
KE7SW	5,868	64	33	3
*N7BKS	1,395	40	14	1
<b>MICHIGAN</b>				
K2PM	206,890	995	57	28
*WBWKKQ	50,901	381	49	8
<b>OHIO</b>				
N080	9,418	116	32	2
W8TB	8,256	111	32	0
K8ALM	825	23	15	0
W8GNM	770	17	12	2
<b>WEST VIRGINIA</b>				
NW8U	48,439	340	50	9
<b>ILLINOIS</b>				
N0GN	21,900	181	44	6
N9LQ	7,360	60	31	9
*A9HQ	2,716	41	26	2
<b>INDIANA</b>				
K9NW	69,654	303	53	25
*KR9E	812	23	14	0
<b>WISCONSIN</b>				
*N9UD0	8,938	100	41	0
N9NBC	385	16	11	0
<b>COLORADO</b>				
KV8Q	114,471	557	54	25
K2R	360	12	12	0
<b>KANSAS</b>				
K3PA	111,051	524	54	27
K0BJ	32,160	217	50	10
<b>MINNESOTA</b>				
K0EA	20,247	166	46	5
K0RJV	12,760	121	43	1
W0AD	9,307	103	40	1
*W0BN	3,220	50	28	0
N1UW	3,164	49	27	1
W0MHI	2,150	37	24	1
<b>MISSOURI</b>				
W0MB	35,728	267	50	8
N0IR	27,060	199	45	10
*K0FD	8,159	75	36	5
<b>NORTH DAKOTA</b>				
W0DS	3,968	55	31	0
<b>CANADA</b>				
<b>NEW BRUNSWICK</b>				
VE9CB	56,280	185	42	18
<b>QUEBEC</b>				
VA2WA	75,790	224	40	25
*VA2CZ	12,528	96	26	3
<b>ONTARIO</b>				
VE3CX	172,590	550	54	12
VE3PJ	42,570	197	40	5
VA3SK	35,010	166	35	10
VE3SS	26,918	133	40	3
*VE3RZ	24,615	117	39	6
VE3HD	9,464	77	25	1
<b>MANITOBA</b>				
VE4EA	28,305	136	43	2
<b>VE6JY</b>	16,340	79	38	5
<b>NORTHWEST TERRITORIES</b>				
VY0CR	10	1	0	1
<b>NORTH AMERICA</b>				
Alaska	2,652	39	10	3
<b>Guatemala</b>				
TL8F	150	5	2	3
RG9AJR	150	5	2	3
<b>Haiti</b>				
HH2AA	1,500	18	10	5
<b>Mexico</b>				
*X2MZY	2,000	28	15	1
*XE1AY	432	12	6	3
*XE1HG	416	10	4	4
<b>US Virgin Islands</b>				
KV4FZ	362,637	528	52	59
<b>ASIA</b>				
<b>Asiatic Russia</b>				
RA9Y	78,253	171	1	48
RW9CQ	59,826	165	0	39
RW2CF	9,776	40	10	16
RT0F	5,795	35	9	10
RW9DX	1,610	19	0	10
<b>Asiatic Turkey</b>				
TA7OM	78,474	202	0	41
*TA7MHZ	31,320	122	0	27
<b>Kuwait</b>				
9K2HN	10,300	43	6	19
<b>Saudi Arabia</b>				
*Z1SJ	210	5	0	5
<b>EUROPE</b>				
<b>Belarus</b>				
EU4E	131,280	410	9	51
<b>Belgium</b>				
ON4LG	52,650	203	4	46
*OT6M	8,475	69	0	25
<b>Bosnia-Herzegovina</b>				
*E7BT	22,912	146	0	32
<b>Croatia</b>				
*9A2EU	17,440	109	0	32
<b>Czech Republic</b>				
OK7K	611,252	1044	38	63
OK1JDX	265,434	627	22	56
*OK2BFN	80,964	314	3	49
*OK6AA	67,830	279	2	49
*OK1AY	65,790	304	3	42
OK5N	28,268	162	1	36
OK7GU	20,800	134	0	32
*OK8DJ	18,810	132	0	30
OK2FD	1,190	25	0	10
<b>Denmark</b>				
*OZ1KVM	9,909	74	0	27
<b>England</b>				
*G5K	136,752	398	13	53
M7Q	78,894	285	7	47
*G3Q	31,640	186	2	33
G4PVM	31,005	158	2	37
G4R	9,802	82	0	26
<b>Estonia</b>				
ESSMG	81,536	275	6	50
ES1BH	1,806	27	0	14
<b>European Russia</b>				
RM4F	90,279	276	9	54
R2EA	60,766	266	2	44
RN30G	59,886	213	2	52
RUIAB	59,384	222	5	47
RK4FD	50,894	192	3	48
*R1DX	46,410	239	0	39
*RZ3Q	44,247	211	2	41
RA3S	39,861	188	1	42
R5ER	31,840	160	0	40
RL4F	17,670	110	0	31
RL4A	14,413	101	0	29
<b>France</b>				

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*D07RO	30	3	0	2
*DF1LX	6	3	0	1
J4ZL	Greece	49,864	209	5 41
H43DX	Hungary	168,904	527	15 53
*HG8C		25,888	163	0 32
H48BT		23,904	151	0 32
*HA7MS		1,120	16	0 14
TF30T	Iceland	2,736	31	0 18
*E2FG	Ireland	3,340	34	0 20
IK0XB	Italy	44,352	204	1 43
I230W		31,900	139	6 38
IK2CLB		25,488	142	0 36
I2WJ		21,590	129	0 30
*I20XD		17,850	122	0 34
I22BVC		12,224	79	0 32
I3WMS		4,686	45	0 22
IU4FLO		4,152	37	1 23
IK2ANI		4,096	36	3 18
*IK2TDM		2,508	27	0 19
*IK8YFU		1,020	17	0 12
UA2FZ	Kaliningrad	169,408	492	14 50
LY4A	Lithuania	620,400	976	33 77
*LY4ZZ		108,075	396	3 52
LY2X		86,090	386	2 44
LY2XW		80,719	292	10 43
LY2RJ		60,207	269	2 45
*LY3AB		50,020	255	1 40
LY2OU		41,108	201	3 40
LY5R		41,082	201	3 38
LY5W		37,278	200	2 36
LY7M		19,950	113	3 32
*LY3B		11,625	102	0 25
LY2BKT		7,119	75	0 21
LX1ER	Luxembourg	146,475	445	13 50
*PC3T	Netherlands	88,828	327	5 48
PH0AS		40,052	212	1 37
PI4AMF		18,150	110	0 33
*PE1EWR		9,072	65	0 28
PA2LO		7,128	54	0 27
*PE4BAS		6,644	61	0 22
*PB7Z		5,100	42	0 25
*PA3EYV		2,310	21	0 21
PA2RG		45	3	0 3
*PA3DDP		45	3	0 3
MI0SLE	Northern Ireland	278,124	580	33 51
GI4T		68,255	226	14 41
LC5K	Norway	139,878	483	5 52
LA/DL7URH		92,092	397	3 43
LC2C		50,204	222	3 41
*LA3BPA		11,544	90	0 26
LB9RE		6,675	54	0 25
LA7JO		495	11	0 9
SP3GTS	Poland	190,684	472	20 56
SP8DIP		88,566	292	14 44
*SP3P		66,440	353	0 40
SP1MVG		64,008	275	2 46
SP4BZZ		52,687	220	4 43
SP4Z		27,945	124	4 41
*SP5EWX		23,868	139	0 36
*SQ9KT		8,120	89	0 20
*SP3JZ		495	11	0 9
YR8D	Romania	161,040	566	5 50
*YD2LSP		118,788	409	5 52
YO8RN		83,157	299	7 46
Y03HOT		39,975	192	0 41
YO8WW		5,478	50	0 22
*Y09XC		4,275	47	0 19
*Y08BDQ		4,158	46	0 18
MM3AWD	Scotland	715	13	0 11
*YT8A	Serbia	106,680	367	6 50
*YT1HA		20,010	141	0 29
*IT9/AZ2WFL	Stiely	34,848	153	4 40
*IT9VCE		27,935	145	1 36
OM3PA	Slovak Republic	14,208	88	1 31
S57DX	Slovenia	350,973	789	24 57
S530		309,680	706	23 57
S54ZZ		170,373	545	9 52
*S52NR		63,304	311	0 41
S53K		55,524	261	0 42
*S57KM		11,900	100	0 25
*S54X		9,959	92	0 23
EA1SA	Spain	121,464	298	21 51
EASAQ		102,570	307	21 50
EASCI		49,852	230	1 43
EA1DYY		23,856	110	8 34
EA1BXJ		15,606	101	1 33
*EF7D		12,672	83	0 33
*EA4DE		5,148	49	0 22
EA3OH		4,092	41	0 22
*EF1T		3,306	35	0 19
EA2OT		2,675	24	0 23
SE0X	Sweden	201,856	609	12 52
SM5EPO		29,855	172	1 34
8S0C		22,829	123	0 37
SB7W		8,856	67	0 27
*SM3PXO		1,764	30	0 12
*SE5N		696	18	0 8
*SA2RJ0		180	6	0 6
H890CXZ	Switzerland	319,226	714	27 55
H89EDU		109,852	363	11 47
H82U		34,086	182	0 38
URSAS	Ukraine	258,488	602	17 62
UX2X		235,076	679	9 59
UT2AA		124,236	382	10 53
UT7CR		120,475	391	10 51
UV07Z		119,130	351	12 54
UV7V		82,957	348	0 49
UT6UD		77,382	286	7 47
UT5EL		75,100	303	4 46
UX5IS		52,752	219	5 43
UY5ZZ		49,056	200	7 41
UT5E0Z		47,235	196	6 41
UR5E		18,102	80	3 39
*UR5RP		14,490	99	0 30
*UX5MC		13,764	89	0 31
UT1DX		8,950	74	0 25
UT8IK		3,743	46	0 19
US6IKF		2,912	43	0 16
UT7E		2,288	34	0 16
*UW6E		540	12	0 9
GW3YDX	Wales	5,880	28	18 3
OCEANIA	Indonesia	36	19	0 1
*YC2FAJ		38	19	0 1
*YC2JOC		32	16	0 1
YF3DFB		30	15	0 1
*Y3BGM		28	14	0 1
YCGATK		10	5	0 1
*YB9QP		6	3	0 1
YB30IR				
LUBDPM	SOUTH AMERICA	4,715	21	10 13
PP5AI	Argentina	2	1	0 1
K1LZ	Brazil	415,035	867	57 58
W1NA		365,598	835	56 58
W1MX		11,680	151	28 4
N1SOH		5,974	82	25 4
N2CW	NEW JERSEY	515,250	1086	57 68
NJ1F	NEW YORK	5,394	70	28 3
WG3J	MARYLAND	102,708	488	53 28
K800		68,072	399	50 17
K3CCR		64,020	375	48 18
NE3F	PENNSYLVANIA	88,010	416	47 23
W3MF		5,404	80	25 3
N2CEI	FLORIDA	338,661	933	57 54
AD4XT	GEORGIA	8,400	90	36 4
AC6ZM	TENNESSEE	35,598	306	45 6
NA5NN	MISSISSIPPI	57,352	345	51 16
K5LRW	NEW MEXICO	7,252	83	34 3
W5RTA	TEXAS	25,758	199	46 8
NX6T	CALIFORNIA	42,775	308	50 9
K7JR	OREGON	43,662	308	49 8
W8CT	MICHIGAN	30,000	258	45 5
ND8DX	OHIO	281,688	1077	57 40
A88M		123,824	744	56 15
W9VW	INDIANA	66,396	400	47 19
CGANN	NORTH AMERICA	196,830	454	50 31
V31GW	Bahamas	360	9	6 2
XE1RCS	Belize	64,170	204	47 15
XE2N	Mexico	2	1	0 1
VP2MKG	Montserrat	132,400	296	46 34
RT9L	ASIA	210	11	0 3
YMAKC	Asiatic Russia	6,760	39	0 20
YMKV		6,260	35	0 20
YMK3K		3,984	27	0 16
4L8G	Georgia	109,460	220	7 45
OH8Z	EUROPE	46,225	207	5 38
E7CW	Aland Islands	173,342	562	8 51
LZ5R	Bosnia-Herzegovina	335,496	713	23 61
LZ9W		299,916	571	15 53
OK4C	Bulgaria	377,118	861	20 62
QL1R		328,880	745	25 55
OK2KOS		47,160	241	3 37
OK2OCT		4,351	50	0 19
UA7K	Czech Republic	496,254	815	31 72
R2VA		37,656	212	0 36
OG4T	European Russia	18,592	112	2 30
TM55M	Finland	72,332	269	7 45
DP6A	France	218,320	543	24 56
DP7D		201,134	687	16 51
DA2X		183,520	520	19 55
DL6WX		143,232	516	13 51
DL7A		108,557	385	11 52
DL6AZ		99,448	337	12 50
DA0Y		89,018	446	1 46
DF8PW		39,040	234	4 36
DL0PS		11,997	95	0 31
DO5M		60	4	0 3
SZ2RCK	Greece	51,136	208	5 42
HG8DX	Hungary	465,888	894	30 62
HG6L		31,523	221	0 29
LY7Z	Lithuania	140,070	387	14 55
LY5AA		129,272	496	4 48
LY2J		112,420	412	5 50
LY2ZO		44,642	279	0 34
LY3X		34,892	157	5 39
Z3M	Macedonia	135,135	465	5 50
SN8B	Poland	416,970	824	29 61
SN9L		159,060	628	6 54
SN5T		79,144	308	5 47
CR5K	Portugal	1,164	17	1 11
Y04KAK	Romania	185	8	0 5
YU7ADY	Serbia	72,283	341	0 43
EF1RKF	Spain	38,948	137	13 39
ED4N		30,160	159	4 36
ED1R		21,880	108	3 37
SK7K	Sweden	4,148	50	0 17
H89CA	Switzerland	466,146	869	34 60
H89LB		106,392	405	9 43
H89PUE		74,100	243	12 45
UZ21	Ukraine	106,377	356	7 52
UR4RWW		16,551	131	0 27
YC3ZBY	OCEANIA	144	16	0 3
YE2T		38	19	0 1
YE1ZAL		30	15	0 1
YB3ZBD		28	14	0 1
7G2Y		24	12	0 1
7E0E		16	8	0 1
PJ4G	SOUTH AMERICA	599,676	514	52 66
PJ4DX	Bonaire	307,242	307	48 53

4251W	AC20C	DD2CW	DJ2BC	DK3GG	DK8HE	DL1AX	DL6JD	EA3EBN	EA6FO	EU1A	G8DXT	G3UHU	GW4W	HA7MF	IK5BOH	K0KX	K4RUM	KM6ZV	K8BSCA	K7TE	LATX	OM7OM	874KW	RA4AT	RACMO	RO3M	RW3RN	SS80	SM5X	SP2QR	SO3WW	UASC	US5VX	YL2EM
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**Check Logs**