



*In the foreground is K1HC's array of 5- and 6-element 144-MHz Yagis on the 120-foot tower at his Harpswell, Maine location.*

## Results of the 2018 CQWW VHF Contest

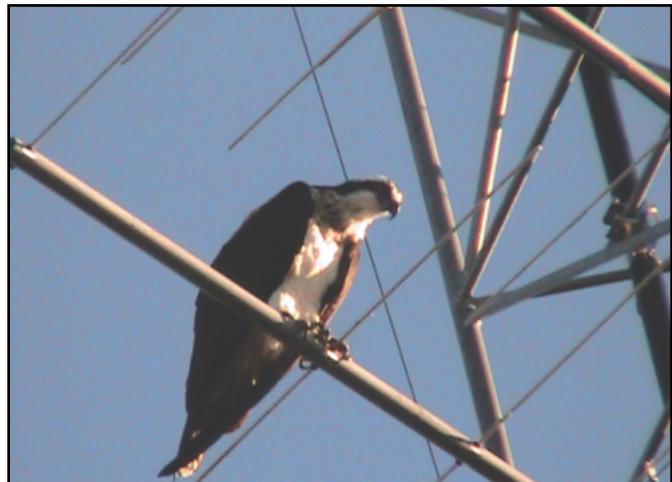
BY STEVE BOLIA,\* N8BJQ

The 2018 CQ World Wide VHF contest saw some pretty good conditions, a record-breaking rove and nearly 50 more logs submitted than last year. While not a record, the 767 logs submitted is the third highest total. Now if we could somehow convince the other 400 or so stations who were worked multiple times (some over 100) to submit logs.

The 2017 contest was the first test of FT8. In 2018, our participants put it to a "real" test. It seemed like there was almost always activity on 50.313. By now, those who used FT8 are aware of, or were part of, the confusion, on whether or not to use NA contest mode for contesting. NA contest mode works well if both stations use it. If they don't, it leads to lots of frustration, several retries, slow rates or lost QSOs, along with a few "choice words." The software authors are busily working on updated software that hopefully will make 2019 much more enjoyable for all. Grids are all that is required for the contest exchange.

There were a few logs in which the grids were not included (all FT8) and those Qs were lost. Please make sure before the contest that you are running the very latest version of whichever FT8 software you choose and are familiar with its use. There are also ways to link FT8 to some logging programs which will ensure that you have the correct data in the log.

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*An osprey stopped to rest on one of K1HC's array of 144-MHz Yagis.*

Even though it seemed that everyone was on FT8, there were other modes used during the contest. CW and SSB still work quite well. If things are really hopping on 313, there's an excellent chance that they are hopping on CW and SSB as well. Dig out the mic or paddle and make some Qs. I even found a headset with a microphone that works and made 18 Qs on SSB (many of which were multipliers), which is more than I often make in a whole year. There were also a couple of good CW openings.

### USA

The big news in 2018 was ACØRA's record-breaking rove with 314,226 points, shattering the 2006 record of NØDQS/R.

## TOP SCORES

### WORLD

<b>All Band</b>	IZ2JNN/IN3 .....	1,105	
EA8DBM .....	147,686	OM7ANT .....	140
XE2JS .....	35,100	UT4RZ.....	81
IW2NOD .....	28,248		
IK7LMX .....	12,236	<b>QRP</b>	
LY2SA.....	11,036	HS5YLK .....	15,168
<b>6 Meters</b>		MØHMJ .....	5,022
XE2X.....	.95,634	UY5ON.....	2,432
ISØBSR .....	63,936	UT8AL.....	2,214
IT9XTP .....	47,736	UT5ECZ.....	2,067
VE4VT.....	45,904	<b>Rover</b>	
VE5MX.....	43,566	HS6MYW .....	1,515
<b>2 Meters</b>		JL3DQX/R.....	21
S56P .....	12,644	<b>Multi-Op</b>	
E23SGP .....	4,092	IO9Z .....	42,328
HS3SMO.....	3,380	E2E .....	28,084
ZS4TX.....	1,922	4O6BLM.....	21,060
US8AR .....	1,536	J48KEF .....	11,266
<b>Hilltopper</b>		E27AAA .....	7,936
HA2VR .....	3,268		
UT1IC.....	1,404		
<b>USA</b>			
<b>All Band</b>		AB1YK .....	620
K2DRH.....	140,513	K7IMA .....	510
NØURW .....	88,074	<b>QRP</b>	
W1XX.....	80,384	KG5ZZB/P.....	9,727
N2NT.....	73,786	N8XA/P .....	7,326
WØUC.....	73,500	AG5QQ .....	2,296
<b>6 Meters</b>		K2GMY .....	2,170
W5PR.....	140,400	K3TW.....	1,200
N5RZ.....	80,712	<b>Rover</b>	
K5QB .....	63,037	ACØRA/R.....	314,226
K1TEO.....	62,156	W3DHJ/R.....	28,014
WA0CSL.....	60,445	K5ND/R.....	19,822
<b>2 Meters</b>		KK6MC/R.....	18,871
K1HC .....	5,232	K2EZ/R.....	18,375
K3SFX.....	588	<b>Multi-Op</b>	
W2KV/2.....	476	K5QE .....	311,982
KØNR.....	192	K2LIM.....	125,440
<b>Hilltopper</b>		W4VHF .....	94,875
WK9U.....	3,224	W3SO .....	58,800
W1QK .....	2,457	W4NH .....	28,919
W1RGA.....	1,590		

Wyatt and KG5CCI spent a year planning and it paid off with 679 Qs and 414 grids. He operated from 10 different grids in 19 hours of operation. Jonesy, W3DHJ/R, finished second, operating from 4 grids, as did Jim, K5ND/R who finished third. Duffy, KK6MC/R, activated 6 grids for fourth and Andrea, K2EZ/R, wrapped up fifth place, activating an amazing 15 grids during her drive.

K2DRH wins the Single Op category this year with Bob back at the helm.

## QSO & GRID LEADERS

<b>6-Meter QSOs</b>	<b>2-Meter QSOs</b>
W5PR .....	649
EA8DBM.....	537
XE2X .....	505
K2DRH .....	476
N5RZ .....	471
NØURW .....	396
WAØCSL.....	384
K1TEO.....	379
W1XX .....	375
AA5AM .....	375
K5QB .....	373
WD5K .....	370
N4BP .....	366
KC4PX .....	365
KØSIX .....	357
<b>6-Meter Grids</b>	<b>2-Meter Grids</b>
EA8DBM.....	273
W5PR .....	216
K2DRH .....	200
ISØBSR .....	192
WØUC .....	190
XE2X .....	189
KC4PX .....	174
N5RZ .....	171
KØ9A .....	170
K5QB .....	169
WB2FKO .....	169
NØURW .....	167
AA5AM .....	164
K1TEO.....	164
W9RM .....	160

## 2018 CQWW VHF TROPHY WINNERS AND DONORS

**WORLD:** Dr. Gene Zimmerman, W3ZZ memorial. Won by: Aleksandr Maksimov, EA8DBM  
**USA:** Steve Bolia, N8BJQ Trophy. Won by: Bob Striegel, K2DRH

### SINGLE OPERATOR, SINGLE BAND

**WORLD 50MHz:** Dennis Motschenbacher, K7BV Trophy. Won by: Jorge Alvarado, XE2X

**USA 50MHz:** Dennis Motschenbacher, K7BV Trophy. Won by: Chuck Deitz, W5PR

**WORLD 144 MHz:** CQ VHF Contest Committee Trophy. Won by: Bostjan Sever, S56P

**EUROPE 144 MHz:** Bostjan Sever, S56P Trophy. Won by: Nick Derenko, US8AR

**USA 144MHz:** Chuck Dietz, W5PR Trophy. Won by: Dick Bean, K1HC

### ROVER

**USA:** Northern Lights Radio Society Trophy: Won by: Wyatt Dirks, ACØRA

### MULTI-OPERATOR

**WORLD:** Dr Gene Zimmerman, W3ZZ memorial (Joe Devenyi, HAØLC donor). Won by: Station IO9Z operated by: IT9DSZ, IT9BXR, IT9KXK, IT9YMM, IT9CND, IT9GRE, IT9GQI, IK1TZO

**USA:** Bob Striegl, K2DRH Trophy: Won by: Station K5QE operated by: K5QE, N5YA, N1XS, AE5VB, VE3WY, WA5CAM, AF8Z

### CLUB

**USA:** Won by: Society of Midwest Contesters

\*Denotes awarded to runner-up in category

Wyatt, ACØRA, had piloted Bob's station in 2017. After Bob, the next five Single Op scores were very close with Daniel, NØURW, finishing second; previous contest director John, W1XX, in third; N2NT (with John, N2NC, operating) in fourth; Paul, WØUC, fifth; and Keith, W9RM, sixth. Chuck, W5PR, turned in the top 6-meter score with his fine 140K effort. Chuck was fixing equipment even as the contest was starting. All Qs were CW or SSB. Gator, N5RZ, was second; Jaroslaw, K5QB, was third; Mary, WAØCSL, fourth; and Vince, KØSIX, fifth. Only four entries were submitted in the 2-meter category with Dick, K1HC, taking the top spot with 109 Qs and 24 grids. Malcolm, K3SFX; Dave, W2KV/2; and Bob, KØNR, were the other three brave souls. Jason, WK9U, takes the top spot in the Hilltopper category; Dan, W1QK, was second; Chris, W1RGA, third; Mike, AB1YK, fourth; and Kim, K7IMA, fifth. In all, there were 10 entries in this category. Juan, KG5ZZB/P, made the best of a good location to finish first in the QRP category. Scott, AG5QQ, was second; Dick, K2GMY, third; Tom, K3TW, fourth; and James, WBØIWG, fifth. The gang at K5QE (operated by K5QE, N5YA, N1XS, AE5VB, VE3WY, WA5CAM, and AF8Z) turned in the second highest score in the contest to win the multi-op category with 311,982 points. Second place goes to K2LIM (operated by KA2LIM, W9KXI, WB2ONA, NX2W, and KB2YCC); with W4VHF (operated by KU4V, AA4ZZ, W4GRW, N4UFP, and W3GQ) third; W3SO (operated by W3YOZ, W3BTX, W3XOX, and W3BC) fourth; and W4NH (operated by W4KXY, N4NIA, W4ATL, KI4US, W4ZST, and WG8S) rounding out the top five.

The Society of Midwest Contesters

(15 entries) takes the U.S. club title with a fine 244K score. Not far behind was the New Mexico VHF Society with 217K (10 entries) followed by the Arizona Outlaws (21 entries) and the Potomac Valley Radio Club (34 entries).

## DX

Aleksandr, EA8DBM, remains at the top of the DX single-op all band category with 147,686 points. Julian, XE2JS, turned in a nice score of 35,100 to claim second place. Emanuele, IW2NOD, was third. XE2X (Jorge) made the top 50-MHz score with 95,634 points. ISØBSR was second with IT9XTP third. S56P is the 144-MHz leader with 12,644 points. Finishing second is E23SGB with HS3SMO coming in third, ZS4TX fourth, and US8AR fifth. HA2VR is the Hilltopper champion followed by UT1IC and IZ2JNN/IN3. HS5YLN wins the QRP category with an excellent 15K score. MØHJM was second, with UY5ON in third.

The gang at IO9Z are the new multi-operator champs, followed by E2E and 4O6BLM. Rover activity was scarce with only two entries, but HS6MYW finished first, followed by JL3DOX/R.

The Italian Contest Club turned in the top DX score in the club competition with 71,246 points (3 entries). The XE-DXers finished second (3 entries) with the Contest Club Ontario third (10 entries).

## The Rest of the Story

The 2019 CQ VHF will be run on July 21<sup>st</sup> and 22<sup>nd</sup>, so mark your calendar. Who knows, by then there could be more new modes to use. You will find the rules in the May 2019 issue of CQ and on the CQ WW VHF Contest website <[www.cqww-vhf.com/rules.htm](http://www.cqww-vhf.com/rules.htm)>. There is now a web uploader on the contest website (many thanks to K5ZD). You can still email logs to the robot, but the web uploader will make your life much

## ROVERS & GRIDS OPERATED

ABØYM/R	.....	DM79 DM78 DM88 DM89 DN70 DN71
ACØRA/R & KG5CCI	.....	EM69 EM59 EN50 EN60 EN40 EN51 EN32 EN31 EN42 EN41
AC7MD/R	.....	CN78 CN77 CN76 CN86 CN87
AF1R/R	.....	FN42 FN43
AL1VER	.....	DN02 DN03
HS6MYW & HS6TIM	.....	OK03 OK04
JL3DQXR	.....	PM75 PM74
KØBAK/R	.....	FN21 FN10 FM19 FM29 FN20
K2EZ/R	.....	FN21 FN11 FN10 FN20 FM19 FN00 FM09 EM79 EN50 EN40 EN41 EN51 EN52 EN53 EN43
K5ND/R	.....	EM03 EM02 EM21 EM11
K7BWH/R	.....	CN96 CN86 CN97 CN87
K9ILTR & KØPG	.....	EN60 EN50 EN51 EN61 EN52 EN62 EN63 EN64 EN53
K9JK/R	.....	EN52 EN51 EN62 EN61
KBØZOM/R	.....	EN10 EN00 EM09 EM19 EM08 EM18
KCØSKM	.....	EN41 EN42 EN31 EN32
KE7MSU/R	.....	CN87 CN86 CN85 CN95
KK6MC/R	.....	DM86 DM85 DM84 DM74 DM75 DM64
N2SLNR & KB2YSI	.....	FN14 FN24 FN13 FN23 FN12 FN22
NN3Q/R & K3WGR	.....	FN20 FN10
VE2GT/W1R	.....	FN34 FN35
W2BDNR & KC2SFU	.....	FN22 FN23 FN13 FN12
W3DHJR	.....	DM88 DM87 DM77 DM78
WD9HBF/R	.....	EM49 EM59

## CLUB COMPETITION

(Minimum of 3 entries required for listing)

### UNITED STATES

Club Name	# Entries	Score
SOCIETY OF MIDWEST CONTESTERS	15	244,500
NEW MEXICO VHF SOCIETY	10	217,111
ARIZONA OUTLAWS CONTEST CLUB	21	193,293
POTOMAC VALLEY RADIO CLUB	34	193,224
CENTRAL TEXAS DX AND CONTEST CLUB	4	174,595
NORTHERN LIGHTS RADIO SOCIETY	11	161,746
TEXAS DX SOCIETY	3	158,868
NORTH EAST WEAK SIGNAL GROUP	8	123,062
PACIFIC NORTHWEST VHF SOCIETY	25	100,879
CAROLINA DX ASSOCIATION	6	99,257
MT AIRY VHF RADIO CLUB	9	95,165
FLORIDA CONTEST GROUP	8	90,418
GRAND MESA CONTESTERS OF COLORADO	11	90,333
CTRI CONTEST GROUP	3	83,468
NORTH TEXAS CONTEST CLUB	3	73,788
BADGER CONTESTERS	9	72,244
ALABAMA CONTEST GROUP	3	42,142
YANKEE CLIPPER CONTEST CLUB	7	34,215
TENNESSEE CONTEST GROUP	3	22,248

NORTHERN CALIFORNIA CONTEST CLUB	3	19,797
SOUTHERN CALIFORNIA CONTEST CLUB	6	18,904
DFW CONTEST GROUP	5	14,880
MINNESOTA WIRELESS ASSN	8	9,689
FRANKFORD RADIO CLUB	4	7,936
SILVER COMET AMATEUR RADIO SOCIETY	3	5,982
WILLAMETTE VALLEY DX CLUB	4	5,477
MAD RIVER RADIO CLUB	5	5,453

### DX

ITALIAN CONTEST CLUB	3	71,246
XE-DXERS	3	43,002
CONTEST CLUB ONTARIO	10	22,133
UKRAINIAN CONTEST CLUB	10	9,916
CLUB DE RADIO EXPERIMENT		
ADORES DE OCCIDENTE	4	5,646
CDR GROUP	10	2,760
CABREUVADX	6	1,165
RADIO CLUB KVARNER RIJEKA	6	937
SIAM DX GROUP	4	252

easier. It will help you make the correct choices before your log gets submitted, hopefully reducing some of the frustration with log submission.

If you operate, please send in a log. Any size log is greatly appreciated. If you need help, please ask. More logs make cross-checking more accurate.

Thanks to JK, K9JK, and Curt, K9AKS, for their assistance. They are quite good at finding things I screwed up. Thanks also to Champ, E21EIC, who collects all of the logs from Thailand, puts them in the right format and gets them submitted between his travels.

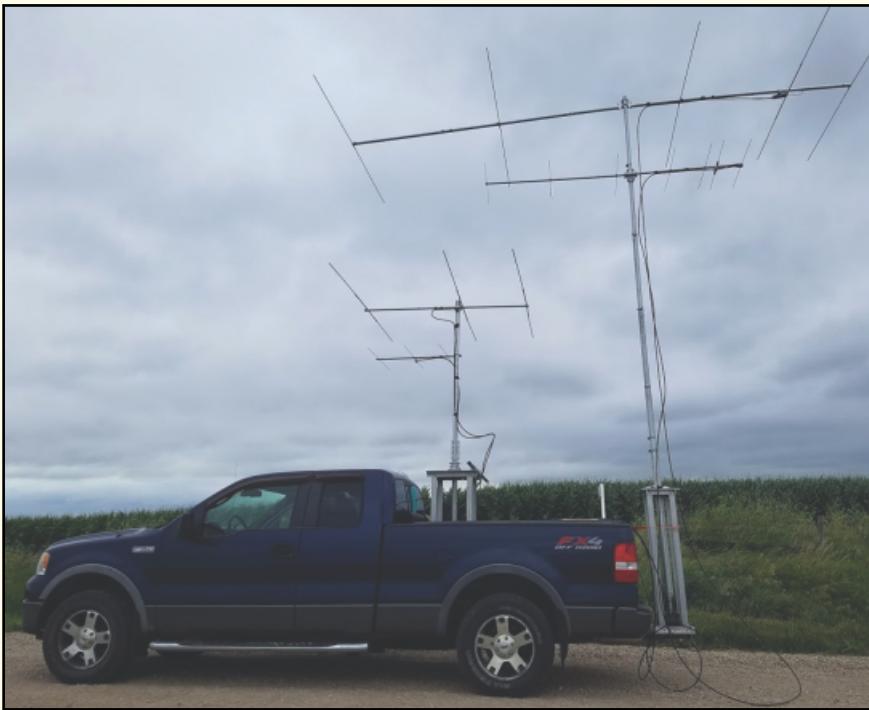
Don't forget to check out the CQ WW VHF Contest website <[www.cqww-vhf.com](http://www.cqww-vhf.com)>. Comments, suggestions, and corrections are always welcome. Quite a bit of the data was entered manually. If you find an error, please let us know.

After a year or so of thinking about it, this will be my last contest as director. I've enjoyed my tenure but it's time to slow down a bit. Thanks to everyone who has helped me out and supported the contest. I've learned a lot about VHF and VHF contesting, which I did very little of before W1XX retired. I'll be around next year to help my successor if he needs it.

He is very well qualified for the job and I'm sure will do a great job. You will have to read on to see who it is.

### Changing of the Guard

As Steve alluded to above, kindly allow me to introduce myself as the new Director of the CQWW VHF Contest. Just as John, W1XX, left some "big shoes to fill" when he retired from the directorship (and I'd say that Steve has filled them admirably and done a fantastic job in continuing and growing this event), Steve is similarly leaving some "big shoes to fill." I hope that I, John Kalenowsky, K9JK, can step into and fill the shoes that Steve is leaving behind and keep this contest going and growing. As I have roved in all of the CQWW VHF Contests since 2003 and have helped both John and Steve behind the scenes over the years, I believe I have some good perspective on the moving parts. I'm appointing Steve as "Director Emeritus" so I'm not letting him totally off the hook. He will bring a wealth of knowledge and memories of little subtleties and quirks that I might encounter as I take on this role. Thanks to Steve (and John, W1XX, before him) for establishing and maintaining a great foundation for me to continue building on. – K9JK



This is the improved ACØRA rover-mobile.

### ACØRA on His Record-Breaking Rove

I went into the 2018 CQWW VHF contest with the goal of winning and then breaking the rover record. I knew this wasn't going to be easy, considering all of the records set in this contest were made in 2006, the "contest to end all VHF contests." In building the rover, I decided to go with a 5-element Yagi on 6 meters for the first time and stuck with the same 7-element Yagi on 2 meters I previously used. I upped the power level on both bands from low power to kilowatt-plus and used digital modes. During the contest, the plan was to activate 10 grids and keep driving throughout the night when most stations were sleeping. During the peak times for E-skip, we were close to grid corners to maximize QSOs during an opening by changing grids — as you never know how long the band will be open. In the end, the plan and the results were great.

– 73, Wyatt, ACØRA

Your Order	
Menu Item	Amount
Fat Milf	\$9.00
Fat Milf	\$9.00
Fried Mushrooms	\$4.50
Fried Mushrooms	\$4.50
Coupon Discount	\$0.00
Subtotal	\$27.00
Tax	\$3.00
Delivery Fee	\$3.99
Tip	\$6.00
Additional Fees	\$1.22



Rover food for ACØRA consisted of a sandwich called the Fat Milf, which cost \$9. A side of fried mushrooms ups the bill...

Number/letter groups after call letters denote the following: Class (A = all bands, 6 = 6 meters, 2 = 2 meters, Q = QRP, O = QRP portable hilltopper, R = rover, M = multi-operator), Final Score, Number of QSOs, Number of grid locators, State/Province (USA/Canada only), Grid Locator or Number of grids activated (rover only). Rover scores for USA are listed separately. Scores in bold indicate certificate winners. Scores in italic are disqualified.

## 2018 VHF RESULTS

### NORTH AMERICA

#### UNITED STATES

W1XX	A	80,384	444	157	RI	FN41	WA3EKL	M	6,200	88	62	MD	FM19	KG5THG	6	6,860	98	70	TX	EM02	WE7X	6	33	11	3	WA	CN97	
K1TR	A	28,034	222	107	NH	FN42	W3RFC	M	6,195	94	59	MD	FM19	KV5W	6	6,279	91	69	TX	EM22	A19Q	6	4	2	2	WA	CN85	
AFIT	A	22,100	198	85	NH	FN43	KC4PX	A	68,780	373	181	FL	EL98	KC7OY	6	6,032	104	58	NM	DM64	K17TRF	Q	40	10	2	OR	CN85	
N1JEZ	A	19,074	156	102	VT	FN44	NA4RR	A	44,354	331	134	FL	EM60	K5LH	6	5,040	84	60	AR	EM45	N7VS	Q	1	1	1	OR	CN85	
N1JD	A	8,999	123	62	ME	FN44	KE8FD	A	41,902	268	146	AL	EM64	K5UV	6	3,468	68	51	OK	EM15	A77MD	H	408	28	8	OR	CN85	
K1KA	A	6,930	102	63	NH	FN42	W3IP	A	26,250	215	105	VA	FM19	AC5D	6	3,350	67	50	OK	EM04	K7ATN	H	352	26	8	OR	CN85	
K1ZE	A	6,042	97	53	CT	FN31	N3MK	A	24,102	192	117	VA	FM27	NA4J	6	2,714	59	46	OK	EM15	K7PLC	H	48	12	2	OR	CN85	
K1GX	A	4,500	79	45	CT	FN31	KC4NX	A	29,304	184	108	TN	EM75	KG5IEE	6	2,436	58	42	TX	EM12	W70TV	M	180	14	12	OR	CN82	
W1AN	A	2,952	61	36	CT	FN41	WA4GPM	A	20,265	189	105	FL	EM90	K5XU	6	2,173	53	41	MS	EM42	N8BJQ	A	25,986	211	122	OH	EN80	
N4NW	A	19,186	181	106	FL	EL98	NA4WW	A	20,196	181	106	FL	EM90	WS5N	6	1,728	48	36	NM	DM45	W8KNO	A	5,551	88	61	OH	EN91	
WB7PMP	A	17,576	158	104	NC	EM95	W4SVC	A	9,100	113	70	FL	EM80	WB5KN	6	1,364	44	31	TX	EM20	W8VW	A	4,452	84	53	OH	EN80	
Op: KDA4MP							Op: WD5R0						NS5TR	6	980	35	28	OK	EM04	NA8V	A	1,395	45	31	MI	EN83		
K4LDC	A	4,134	77	53	GA	EM74	Op: WD5R0						W5VY	6	725	29	25	TX	EL29	W8BWKQ	A	1,230	40	30	MI	EN82		
K5VIP	A	3,780	68	54	VA	FM16	K4ELI	A	1,836	53	34	GA	EM74	WA5WF	6	690	30	23	TX	DM85	KD8TFN	A	910	35	26	OH	EN91	
N5LD	A	1,836	53	34	GA	EM74	W4GAA	A	1,750	46	35	GA	EM74	K5MV	6	437	23	19	TX	EM20	WB8WUA	A	126	12	9	OH	EN91	
N3JT	A	1,440	48	30	VA	FM18	W4MYA	A	736	32	23	VA	FM07	W5YBT	6	437	23	19	NM	DM73	AA8TA	A	48	8	6	OH	EN80	
K4FTD	A	198	17	11	VA	FM18	W4ALDU	A	624	24	24	SC	EM93	NA4J	6	2,714	59	46	OK	EM15	K7CAO	A	2	2	1	OH	EN91	
Op: W5R0							Op: W5R0						NS5T	6	432	24	18	TX	EL29	N8UR	A	25,344	198	128	MI	EN75		
K4AJZP	A	24	4	4	SC	EM87	K4AJZP	A	24	4	4	SC	EM87	K5CRJ	6	56	8	7	MS	EM50	W6JH	A	4,956	84	59	OH	EN81	
K4MKMU	A	21	4	3	VA	FM19	K4MKU	A	12	4	3	GA	EM73	NS5E	6	42	7	6	OK	EM14	A8A8MA	A	1,036	37	28	OH	EN80	
K4KIO	A	12	4	3	GA	EM73	K4KZB/P	Q	9,727	137	71	FL	EL96	KG5ZZB/P	Q	9,727	137	71	TX	EM10	NS80	A	1,025	41	25	OH	EM89	
Op: K4CWVW							AG5QQ	A	2,296	50	41	TX	EM12	W8RU	6	675	27	25	MI	EN72	W9P	A	2,408	56	43	MI	EN72	
N4BX	A	39,000	312	125	FL	EM60	K5NZ	Q	224	16	14	AL	EM63	WA5BUC	Q	180	15	12	TX	EL29	W8ASA	A	2,000	50	40	MI	EN82	
W4SAI	A	35,712	276	128	AL	EM63	Op: K4CWVW						K5QE	M	311,992	638	326	TX	EM31	K9NW	A	1,755	45	39	MI	EN62		
Op: W1QK							KG5MVZ	M	12,450	148	83	TX	DM93	KV4ZY	6	72	9	8	OH	EN91	N8FM	A	6	72	9	8	MI	EN82
K1DJ	A	1,161	43	27	MA	FN42	N4PN	A	31,496	254	124	GA	EM82	K5CJ	M	31,992	638	326	TX	EM31	W8XA/P	Q	7,326	92	74	OH	EM89	
W1BS	A	1,116	36	31	MA	FN32	K5UB	A	23,165	205	113	GA	EM72	K6ZH	A	4,984	88	56	CA	DM12	W8UC	A	7,350	319	210	WI	EN44	
KC1GWX	A	289	17	17	MA	FN42	KM4HI	A	15,561	171	91	FL	EL89	KG6ZWT	A	4,400	43	28	CA	CM98	A	25	5	5	OH	EM79		
N1CGP	A	63	9	7	ME	FN54	N3CMGH	A	9,956	131	76	FL	EM60	K6MIE	A	672	32	21	CA	DM13	W9EZW	A	15,295	148	95	WI	EN52	
N1WRK	A	49	7	7	MA	FN41	K4BAI	A	9,120	120	76	GA	EM72	K6YK	A	345	19	15	CA	CM97	K2DRH	A	140,513	548	227	IL	EN41	
K1AR	A	45	9	5	MA	FN42	W4HLR	A	7,519	103	73	TN	EM55	WA6ZTY	M	13,230	147	90	CA	CM98	W9UC	A	73,500	319	210	WI	EN44	
W1GXZ	A	25	5	5	MA	FN42	KK4MA	A	7,480	110	68	SC	EM92	K6QZQ	M	10,824	132	82	CA	DM03	ND9Z	A	17,473	164	101	WI	EN54	
N4NIV	A	6	3	2	MA	FN42	K25X	A	6,039	99	61	SC	EM93	N9C	M	6,840	88	55	CA	DM13	W9EZW	A	17,473	164	101	WI	EN54	
K1HC	2	5,232	109	24	ME	FN53	KN4Y	A	5,665	103	55	FL	EM70	K9YC	A	4,047	71	57	CA	CM87	K0Z	A	7,384	101	71	IL	EN59	
N1AIA	Q	608	27	19	ME	FN43	N4MM	A	4,823	91	53	VA	FM09	N6CK	A	3,120	65	48	CA	DM13	W9PA	A	4,536	81	56	IN	EN60	
KC1IJS	Q	390	22	13	CT	FN31	N4KC	A	4,617	81	57	AL	EM63	K6KRC	A	2,200	55	40	CA	CM98	AC9EZ	A	1,564	46	34	IN	EN71	
K1SX	Q	132	12	11	MA	FN41	K1A1F	A	4,293	81	53	FL	EL98	N2JNR	A	1,160	40	29	CA	DM04	KC9ELU	A	1,517	38	37	IN	EN79	
W1OK	H	2,457	63	39	CT	FN31	KJ4MSR	A	3,283	67	49	GA	EM73	KD7WPJ	A	195	15	13	CA	CM79	N9LB	A	1,419	40	33	WI	EN52	
W1RGA	H	1,590	42	30	NH	FN33	WX4US	A	2,948	67	44	FL	EM60	WB6IZG	A	165	15	11	CA	DM13	K9CT	A	874	35	23	IL	EN50	
AB1YK	H	620	27	20	NH	FN32	K4QE	A	2,852	62	46	NC	FM05	N6RPM	A	144	12	12	CA	DM04	KF9US	A	858	33	26	WI	EN55	
N1SOH	M	1,200	44	24	MA	FN42	K5EK	A	2,745	61	45	NC	FM03	W6IA	A	120	12	10	CA	CM97	N9NDP	A	744	27	24	WI	EN62	
N2NT	A	73,786	359	158	NJ	FN20	NG4CD	A	2,120	41	32	TN	EM65	N6VH	A	25	5	5	CA	DM12	WB9TFH	A	425	23	17	WI	EN53	
WW2Y	A	4,565	74	55	NY	FN24	Op: N2NC						W6JBH	H	350	25	14	CA	DM13	WB9BWP	A	306	18	17	IL	EN59		
AA2TT	A	3,808	83	34	NY	FN30	W4CH4	A	1,230	41	30	FL	EL98	W6P	A	19	7	7	CA	DM13	K09A	A	52,020	306	170	IL	EN52	
WA2VN	A	2,850	66	30	NY	FN30	K4FJW	A	759	33	23	VA	EM86	W4WNT	A	696	29	24	NC	FM03	W9OM	A	31,144	229	136	IL	EM59	
W2UDT	A	2,448	55	36	NJ	FN20	W4WNT	A	696	29	24	NC	FM03	N7GP	A	44,616	312	132	AZ	DM42	K9OM	A	27,903	213	131	WI	EN65	
K2AMI	A	2,291	73	29	NJ	FN20	K4SX	A	696	29	24	TN	EM75	NR7T	A	44,496	305	144	UT	DM38	W7EW	A	8,667	107	81	IL	EN59	
N2SL0	A	2,263	53	31	NY	FN30	N4NM	A	600	30	20	AL	EM64	W7EW	A	3,490	262	126	OR	CM84	K9KON	A	6,141	89	69	WI	EN54	
K2ELV	A	2,124	49	36	NY	FN12	KK4AND	A	575	25	23	FL	EL87	N7IR	A	28,405	232	115	AZ	DM43	KD9VW	A	4,104	72	57	IN	EN71	
W2SJ	A	1,488	40	31	NY	FN29	K4E4S	A	520	26	20	VA	FM19	N7CW	A	23,316	174	134	AZ	DM14	W7FI	A	2,230	213	93	WI	EN63	
N2BEG	A	1,305	37	29	NY	FN12	KM4IAJ	A	408	24	17	VA	FM18	N1RWF	A	16,181	177	89	AZ	DM43	WB9NUR	A	1,470	42	35	WI	EN63	
KC2BPP	A	510	26	15	NY	FN30	W4AU	A	360	24	15	VA	FM19	WA9IHW	A	1,080	36	30	WI	EN63	W9P	A	1,080	36	30	WI	EN63	
K2ZI	6	10,293	141	73	NJ	FM29	K4ORD	A	336	21	16	VA	FM07	KD7UO	A	9,6												

JAPAN												SICILY																			
KC0CCR	6	460	23	20	KS	EM29	JQ1NQT	A	2,970	102	22	PM95	9A3TU	Q	60	7	6	JN95	IT9XTP	6	47,736	306	156	JM68							
KL7UW	6	440	22	20	CO	DN70	JJ1DOR	A	140	14	10	PM95	9A1CBM	M	380	20	19	JN83	IT9CHU	6	6,500	100	65	JM76							
WG6NF	6	240	16	15	MN	EN18	J11FLB	B	240	20	12	PM95	CZECH REPUBLIC												JM77						
K0FXX	6	180	15	12	CO	DM79	L74IOU	B	140	14	10	PM95	OK1DC	A	800	29	25	JN69	IT9NAN	6	2,397	51	47	JM67							
KB0HP	6	120	12	10	CO	DM69	J46WFWM	B	128	16	8	PM52	OK2TS	B	64	8	8	JN89	I09Z	M	42,328	251	148	JN67							
W0UJY	6	110	11	10	KS	EM18	JP1LRT	B	80	10	8	PM95	OL1B	M	644	28	23	J080	SLOVAK REPUBLIC												JN65
K0G0HY	6	81	9	9	NE	EN20	JF1MIA	B	45	9	5	PM95	ENGLAND												OM3IAG	Q	187	14	11	JN99	
K0TC	6	18	6	3	MN	EN35	JR80FG	B	10	5	2	QN03	MO1HT	A	25	5	5	I080	OM7ANT	H	140	16	5	JN99							
K0NR	2	192	12	8	CO	DM79	J45FBZ	B	4	2	2	PM63	G4AYU	B	36	6	6	I083	SLOVENIA												JN65
WB0IWG	Q	1,140	38	30	ND	EN06	JA8KGG	B	4	2	2	QN03	MO0HPH	B	36	6	6	I091	S56LXB	6	323	19	17	JN65							
K10G	Q	99	11	9	CO	DM69	JE2BOM	B	4	2	2	PM84	MO0HJM	Q	5,022	81	62	I080	S56P	2	12,644	109	58	JN76							
W0OHU	Q	30	6	5	MN	EN33	J49CWJ	B	4	2	2	PM86	QN03	SICILY												JN67					
N0JK	H	20	5	4	KS	EM28	JK8PBO	B	2	2	1	QN03	SLOVAK REPUBLIC												JN67						
Rover												QF7VVL	B	2	2	1	QM08	SICILY												JN67	
AC0RA/R	R	314,226	679	414	10	JH1NXU	B	1	1	1	PM95	RA7C	2	1,406	37	19	KN94	EA1HRR	A	1,395	41	31	JN83								
W3DHJ/R	R	28,014	186	138	4	JH3DMQ	B	24	4	3	PM74	RD3FD	2	1,012	23	22	K095	EA1AAE	A	425	21	17	JN81								
K5ND/R	R	19,822	177	106	4	JR2WLQ	B	18	9	1	PM84	R6CS	2	416	16	13	KN95	EA1BFZ	A	30	5	5	JN81								
KK6MC/R	R	18,871	151	113	6	JR1UXJ	Q	1,068	73	12	PM95	UA1ZFG	B	162	9	9	K046	EA4AA	6	1,976	52	38	JN80								
K2EZ/R	R	18,375	129	105	15	JA6GCCE	Q	120	12	10	PM52	RNGBP	2	126	9	7	KN94	EC5AC	6	1,530	45	34	JM98								
K9L1T/R	R	17,496	140	108	9	JA2YAF/2	M	2	1	1	PM84	UA6AH	B	70	7	5	KN94	EA5YI	6	644	28	23	JM99								
K9JK/R	R	16,700	140	100	4	THAILAND												RA6XB	EA6BI	2	18	3	3	JN82							
N2SLRN/R	R	12,556	108	86	6	HS3LSE	A	2,628	66	36	OK14	R7CS	2	2	1	1	KA04	EA1DHB	6	49	7	7	JN82								
KB020M/R	R	10,440	95	87	6	E24QND	A	648	54	6	OK16	LN23	6	8	2	2	LN23	EA1BYA	Q	456	24	19	JN70								
KC0SKM/R	R	4,717	75	53	4	HSSR9H	B	11,424	136	84	NK98	RA20Y	6	270	18	15	KP20	EA3GYE/P	Q	1	1	1	JN12								
WD9HBF/R	R	3,942	66	54	2	HS2NSN	B	1,000	40	25	OK02	RA4DE	M	3,996	65	37	JN93	SICILY												JN93	
K0BAK/R	R	3,772	61	46	5	HS2UPR	B	4	2	2	OK14	FINLAND												SA6MIW	6	182	14	13	J057		
K7BWH/R	R	2,250	76	25	4	HS2NSN	B	442	34	13	OK03	FRANCE												UKRAINE	F5KEQ	A	2,640	49	40	IN97	
ACT7MD/R	R	2,146	53	29	5	HS0AQS	B	425	25	17	OK03	GERMANY												Op: F5MYK	UY1HY	A	5,890	87	62	KO60	
W2BDN/R	R	1,972	42	34	4	E2X2	B	399	21	19	OK06	Op: E20MDN	@E2AAC	1	1	1	JN18	UT1KY	A	1,247	43	29	KO20								
AB0YM/R	R	1,887	41	37	6	ALASKA												F6CZV/P	6	20	5	4	IN77								
KE7MSU/R	R	1,575	46	25	4	HS2NSP	B	4,092	186	11	OK04	DK20Y	6	380	20	19	J044	UT8SM	A	825	33	25	KN28								
NN3D/R	R	943	40	23	2	HS1JZT	B	99	11	9	OK04	DL/KY1A	6	9	3	3	UT9QO	A	672	24	14	KN87									
AF1R/R	R	216	15	12	2	HS0ZCW	B	84	12	7	OK03	RA20Y	6	620	22	20	KN56	UT1ZZ	A	620	22	20	KN56								
W6EH/R	R	169	13	13	4	E24UAY	B	4	2	2	OK03	DL/KY1	6	36	6	6	JN56	UT2XQ	6	9,048	104	87	KO40								
VE2GT/W1/R	R	36	6	6	2	E20SJ	B	4,092	186	11	OK04	DL/E21EIC	6	4	2	2	JN40	UT4XU	6	6,460	95	68	KN40								
CANADA												US8ZAL	6	5,829	87	67	JN66	SWEDEN												JN67	
VA6AN	A	7,590	107	66	AB	DO42	E24OYI	B	240	40	3	OK03	Greece												SA6MIW	6	182	14	13	J057	
VE3SMA	A	7,521	102	69	ON	FN03	HSJWJH	B	168	28	3	NJ98	SV1NZX	6	12,369	133	93	KM17	UT2H2	6	2,226	53	42	KN79							
VE7DAY	A	6,016	93	64	BC	C070	E25BYB	B	162	27	3	OK14	SV2/RW3AL	6	3,795	69	55	KN10	UT8NM	A	1,462	43	34	KN77							
VA3TC	A	4,292	69	58	ON	FN14	E24TVS	B	104	13	4	OK17	SV1RV	6	210	15	14	KM18	UT2Q0	6	704	32	22	KN77							
VA7FC	A	3,200	67	40	BC	CN79	E24KHS	B	96	16	3	OK14	SV1RVJ	6	36	6	6	KM18	UT5V4	6	638	29	22	KN77							
VE5DLC	A	1,856	58	32	SK	D060	HS3JVT	B	90	15	3	OK14	SV3RPQ	6	25	5	5	KM18	UT9UZ	6	380	20	19	KO50							
VE3ST	A	1,645	44	35	ON	FN03	HS4LKW	B	72	18	2	OK16	J48KEF	M	11,266	123	86	KM08	UT1Q0	6	340	20	17	KN77							
VA2BN	A	546	26	21	QC	FN36	E22EXA	B	10	5	1	OK04	Hungary												UT7U0	6	320	20	16	KO20	
VE3WU	A	168	14	12	ON	FN03	E25CHP	B	6	3	1	OK03	HA5BA	Q	42	7	6	JN96	UT6QS	A	132	12	11	KN77							
VE3AYR	A	126	12	9	ON	FN03	E23EHN	B	6	3	1	OK14	HA2VR	H	3,268	61	38	JN87	UT8QK	6	90	10	9	JN30							
VA7ST	A	1	1	1	BC	DO00	HSYSLK	B	15,168	192	79	NK99	HH6ZG	M	5,124	61	42	JN97	US8UA	6	42	7	6	KN59							
VE4VT	6	45,904	302	152	MB	EN19	E24TAQ	B	160	20	4	NK98	Op: F5MYK	UT1XX	6	1	1	KO40	UT8AL	6	1,536	32	24	KO60							
VE5MX	6	43,566	318	137	SK	DN89	HS6GMWY	B	1,515	58	15	OK03	Op: E21EIC	UT1XX	6	850	25	17	KN87	UT7QDQ	6	28,248	189	107	JN45						
VE6UF	6	22,018	209	102	SK	D061	E2E	M	28,084	322	59	OK03	UT9LXW	A	12,236	125	92	JN80	UT8LN	2	450	18	15	KN87							
VE3R3X	6	11,868	138	86	ON	EN96	E27AAA	M	7,936	248	16	OK04	UT4ZJH	A	6,771	86	61	JN80	UT8NM	A	308	15	11	KN88							
VE01KVT	6	2,128	58	21	NL	GN29	HS6EDP	M	3,960	165	12	OK04	UT4ZJH	A	11,193	123	91	JN70	UT8L8N	2	240	12	10	KN88							
VE3SCN	6	594	27	22	ON	FN14	E27AU	M	2,940	83	28	OK03	UT4ZJH	M	5,246	86	61	JN70	UT8NM	2	60	6	5	KN88							
VE3PJ	6	414	23	18	ON	FN14	HSJUQ	M	2,616	109	12	OK04	UT4ZJH	M	918	34	27	JN53	UT7QDQ	6	60	6	5	KN77							
VE3HED	6	324	18	18</																											