

Field Day 1997

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When and if a call comes through for help with emergency communications, we know we will be ready. Field Day 1997 tells us that—it was an outstanding success! Field Day is an emergency communications preparedness exercise, and boy, do we have people that are interested in emergency communications! Judging by the excitement generated on Field Day, it clearly ranks far ahead of all other operating events. It's not an exaggeration to say that Field Day is the premier operating event of the year.

If you didn't participate in this year's Field Day, you were one of the few folks who didn't relish the excitement. Besides providing us with the opportunity to practice our emergency communications skills on a national level, Field Day is unquestionably fun and exciting. It offers most anything you can think of—club outings, lots of contacts, opportunity to try new modes and bands, camaraderie, great food, station setup, and emergency training.

Clubs and groups play a very important part in Field Day. It's not easy to pull together everything that you need for a successful Field Day by yourself. Clubs have the members and resources for getting everything done. They have the ability to find experts in all phases of Field Day—leadership, setup people, equipment suppliers, cooks, operators, traffic handlers, public relations people, computer experts, clean-up crews, and so on. You wouldn't think a little emergency preparedness exercise would entail so many different things. Active clubs spread the responsibilities among their many club members. This lets everyone in the club enjoy themselves and get down to what they really like—operating!

In a time of real disaster, we will need this network of emergency communicators. That's why we practice on a national level in portable locations. The goal is to learn to operate in abnormal situations under less-than-optimum conditions. As the old saying goes, "Practice makes perfect." That's why we know we will be prepared, and have the people and resources that are required, when called upon to provide emergency communications.

Field Day keeps on growing! This year more than 33,285 people headed for their favorite locations and set up 2038 sites—up slightly from 1996. Again, SSB proved to be the most popular mode of communication. There were 782,943 phone QSOs reported, and 495,350 CW QSOs, for a grand total of about 1.2 million contacts.

In keeping with the tradition and spirit of



Jessie, KE4RLJ, working 80 meters through the early morning hours.

Top 10 Scores

Call Sign	Score	Class
N1NH	22,080	27A
W4IY	16,904	9A
W2GD	15,824	4A
K4BFT	14,462	5A
KK8M	14,175	17A Battery
K7TR	14,108	4A
N8FD	13,306	6A
K5DX	12,706	2A
K2AA	12,602	6A
W9MU	12,112	3A



Todd, KF6KWY (a new ham), is eagerly operating the VHF station with his H-T.

emergency communications, 1622 participants ran 100% emergency power. There were 1390 generator-powered FD stations and 458 stations used batteries.

The 2A entry category was again the most popular with 594 entries. The second most popular class was 3A with 366 entries. Check the boxes for further breakdowns.

Comments from several groups are listed below. See you next June 27 and 28 for Field Day 1998!

W9HL, 1B2, Illinois

My son Spencer, KB9OPD, and I had a great time operating Field Day. We started setting up at 1800 UTC and made our first contact at 1848 UTC. The weather was ideal and we enjoyed the afternoon out together. Our operating time was short because of other commitments, so we had to close down the station at 2200 UTC. The station consisted of a Kenwood TS-50, Outbacker Perth antenna with an Alpha Delta tripod, a TH-79A, a roll-up J-Pole for 2 meters, a KPC-3 packet TNC and an HP200LX palmtop computer for packet. Our solar panel generated 1.4 A to charge two 700 mA/h gel cells to power the station. We had so much sun, the batteries were still fully charged when we closed down!

W3MWY, 1B1B, Maryland/DC

Edison was right: 1% inspiration and 99% perspiration. The whole idea got started at a Quarter Century Wireless Association (QCWA) luncheon. That's when I realized that 1997 would be my 50th anniversary as a ham. Why not celebrate with Field Day?

At first, Field Day did not seem to be a viable way to celebrate a golden anniversary. My experience lately had been limited to 30 meter operating. Besides, the "field" part of Field Day long ago lost its allure. But would it be possible to operate from my own back porch some 50 feet away from my regular station with a "ground up" installation? I queried the fellows at the table, and they all seemed to agree.

Armed with inspiration, I sallied forth to the perspiration part and gained an education as well. The rig became the first priority because I would have to operate in the regular ham bands; my MFJ-9030 30-meter transceiver would be useless. And as a die-hard QRP operator, I refused to buy a 100-W rig. I considered a Ten-Tec because its tiny band modules provide considerable flexibility. A small rig would also be an asset if I ever decided to return to Mooseonee, Ontario, for a great mini-DXpedition, or to VO2 or FP8 lands. The days were slipping by and I re-



AD4PU giving W5WW a lesson in sending code.



Ed, AH7L, shows the operators the proper way to turn on the HF rig. "Without this button engaged," he points out, "the operating procedure can not continue!"



Chris, KB0VCG, aboard the *Synergism* at sunset in Carterlake, Colorado.

mained on the horns of my dilemma. I finally settled on the Ten-Tec. It was ordered and all I had to do was wait for the UPS truck.

The battery would be a snap. I'd just run down to Kmart and grab an automobile type off the shelf and jury rig a station for a test run. Whoa! There are batteries and there are batteries. Automobile batteries provide a gigantic punch for a few seconds and then get recharged immediately by the car's alternator. That wouldn't do for a Field Day station. I needed something that could tolerate a 20% 2-A and an 80% 6-A duty cycle for a 24-hour period. That meant a battery in the 20 A/h range. So, I bought the DC-6 deep-cycle type, thanks to the patience of the engineering sales people at Exide. When all the components were assembled, I was ready for a test run.

At about 30 minutes into my test, the digital readout of the rig went blank. It was less than two weeks before Field Day! I was devastated. I had visions of faking the whole show on 30 meters for the benefit of all the nonhams I had invited to the event. I contacted Scott Robbins at Ten-Tec the next morning. He assured me he would personally see to it that my radio would be back in time.

While I waited I made signs to direct friends and other interested parties to my station. To my immense relief, the rig returned safe, sound and fixed a full week before Field Day.

Field Day Entries By Class

1A	283	14A	1	2D	6
2A	594	17A	1	3D	8
3A	366	21A	1	4D	4
4A	127	27A	1	1E	81
5A	83	1B1	112	2E	13
6A	30	2B1	2	3E	4
7A	18	1B2	61	4E	2
8A	7	2B2	25	5E	1
9A	9	3B2	2	7E	1
10A	4	1C	37	8E	1
11A	6	2C	4		
		1D	143		

The great day arrived. Out came the sling shot and weighted monofilament line. Zing! I shot my antenna support line up and over the wrong limb of the right tree. It wasn't as high as I had wanted, but it was acceptable. I posted the guide signs for my visitors. The beer and soft drinks were cooled. The potato chips, pretzels and goodies were put out by my wife Alice. Using my Realistic receiver, I copied the W1AW Field Day message. At 1800 UTC, I plugged in the rig and awaited the commencement of Field Day.

Whatever anxiety I had about an untried rig soon vanished as I started racking up QSOs. By 0600 UTC Sunday morning, I had reached 98. The weather was warm, but not hot. The QRN was manageable, and I did not get bitten by a single mosquito. My visitors received an up-close-and-personal introduction to ham radio and enjoyed the party. In short, it was great!

The one moment of high drama came when Sir Ruff of Wolverton, our Belgium Shepherd-Labrador, who never before touched anything on the table, decided to sample the icing on the golden anniversary cake. Like Marmaduke of cartoon fame, he did not have to climb to reach it but just gave the one side of it a swipe of his tongue.

Thus my first Field Day in more than 40 years ended. Do I look forward to doing it again next year? As the guy in the Pontiac TV ad says, "You can bet your Ascot I do."

N5BL, 2A, New Mexico

The Mesilla Valley Radio Club had one of its most frustrating Field Days in recent years. It all started Wednesday evening when our Field Day chairman gave me a call saying that he had a family emergency and had to leave for Dallas the next day. The responsibility then fell on me as club president to finish making plans for the weekend.

Friday afternoon our antenna crew did a bang-up job getting everything in place, and we thought we were in good shape. But when I went to open the gates at the site (our local high school soccer field) at 7:15 Saturday morning, I discovered that all of our antennas were down! During the early part of Friday evening, a microburst with extremely high winds roared through and wiped us out.

Well, what to do next? We got our crew together, disassembled our ruined 3-band Yagi antenna and put a vertical in its place. We located a new mast for our 10-meter Novice/Technician Plus station beam, and reset our 6-meter beam.

As this was happening, an emergency call came in from the Mesilla Valley Search and Rescue, requesting us to send a crew to Mayhill, New Mexico, 100 miles away. They needed our assistance to provide communications during the search for a 15-year-old youth who had not returned from a hike on Friday. A substantial portion of our Field Day crew promptly headed for Mayhill.

Looking back on the weekend, I realized that our situation really exemplified what Field Day is all about—making everything work under adverse conditions. We could not have done this without the cooperation of our club members. They went the extra mile.

KC7UXA, 1D, Nevada

What a deal! After being off the air for 30 years, I recently rejoined the ham ranks. When Field Day arrived I was still new to everything, but learning fast! A lot had changed in 30 years.

I went on the air Saturday for what I expected to be a few leisurely 40-meter CW QSOs. To my astonishment, the bands were filled with wall-to-wall signals. I had never heard so many hams on the air at the same time! I had always thought that Field Day was about setting up in remote locations and working a few stations. Obviously, I had no concept of what Field Day really was!

I wanted to jump right into the fray, but didn't know what to do. I tried to make a couple of SSB QSOs. My first contact was with an operator at W6CUS in the East Bay

section. He was nice enough to take the time to explain the class and section exchange to me, and I was on my way. I don't know the op's name. We only exchanged class and section, after he educated me.

I did not end up with a huge score, but I got my feet wet. I'll be back next year with a plan—instead of a lot of questions!

NI0A, 1B1B, Minnesota

I chose to operate QRP this year using my daughter's new North Woods cabin on Island Lake, about 20 miles west of Duluth, Minnesota. I arrived on the scene with two portable antennas: a 40-meter delta loop and a newly refurbished 102-foot dipole outfitted with a new heavy-duty 450-Ω ladderline feed.

I decided to put up the dipole because I wanted to work 80 meters without a lot of hassle. But now, looking back, I should have put up the delta loop. It might have been easier!

Because of the heavily wooded area, the only place to put up any kind of wire antenna was above the cabin in a north-south direction. The longest open distance was only 80 feet between a tree on the southern edge of the clearing and another tree at the northern edge. At the northern edge the property dropped off at a steep angle down to the lake 80 feet below. I decided to shorten the dipole by folding down 10 feet of antenna wire at each end so that I could fit it into the space. I ended up with a shortened dipole sloper. All this was accompanied by many missed shots with a sling-shot. A heavy wind was causing the lead weights to drift off target and it was so beastly hot that sweat kept rolling into my eyes. Various critters were chewing at me, including tiny no-see-ums that raised big swollen welts where they chose to sting.

At the start of the contest on Saturday, I tried 40 meters, but was unable to raise anyone with my 4 W. I quickly switched to 20 meters where I did much better. I had to cease operation for about three hours early Saturday evening when heavy weather moved in with lightning and loud crashes of thunder. Further delay was caused by more rough weather moving in at mid-morning on Sunday, but it cleared up before the end of the event. I was happily surprised at all the activity on 15 meters and was chalking up QSOs on that band right to the very end.

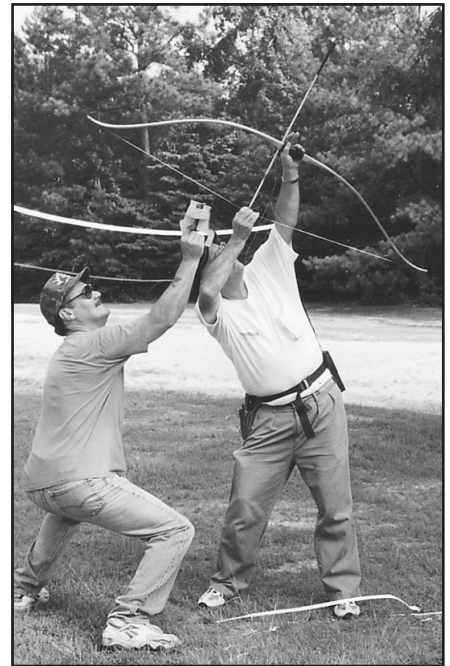
Because of my QRP status, I chose the strategy of search and pounce. It was extremely frustrating to hear some ops with strong signals, rapidly sending strings of CQs without pausing long enough to hear a response from someone trying to contact them. I'll bet they unknowingly missed a lot of contacts! It was a fun Field Day, however, and I can hardly wait for next year!

W8DZ, 2A, Ohio

It was a wonderful experience. Except for a very brief shower around midnight, the weather was magnificent, like the views from all sides of Mount Storm Park. The antennas were, well, "adequate." The rigs and other equipment were great. The camaraderie, the



Vickie, N6WWO, did the logging and operated the 2-meter packet station, while Pete, W6PMV, worked on 40-meter SSB.



"Yeah, that looks like a good spot!" KC5GVB and WB5VEV putting up the CW line. Watch out for those low-flying ducks.

guys and gals who participated, were the best of the best. Just a couple of examples include:

- Somewhere between 1 and 2 PM, Kishore, KC8FNA, resolutely drew a bead and fired a weighted line into a tree. His aim was true but he was standing on the line. It instantly snapped back to earth, never reaching the tree. Many hams, including Kishore, were on the ground laughing!

- Around dawn, Jay, N9JP, and Bob, W8RHR, fixed an antenna and antenna tuner that *weren't* broken. Surely one of our finest moments!

- In the middle of the night, Charlie, KB8BWE, startled the sleepy operators by suddenly appearing on the scene and racking up a tremendous number of CW points.

- Another set of night owls, Jeremiah, KE4TCO, and Allen, WA9IRS, worked feverishly with rigs and computers to line up a satellite contact. Charlie, KB8BWE, jumped in and helped make the kill. It was good team effort and another success.

- Anna, KC8DWR, stole one contact after another as she ran the Novice/Tech station. What is it about the sound of a female voice that makes even the toughest contesters and DXers respond, "The YL! The YL only! Go ahead!"

The set-up took an hour and a few minutes. The tear-down was accomplished in 30 minutes flat! Lots of help, lots of willing hams—truly a Field Day to remember, and a great foundation on which to build. See you next year!

AA8UP, 1B2B, Ohio

This was the first Field Day for me, AA8UP, and John, KC8GGO. I had monitored in years past, but never participated actively. John was a relatively new ham and I, though having been licensed for 4 years, had just bought my first HF radio. We decided to operate 1B-battery for a couple of reasons. First, we had only one HF rig and, second, we had access to a marine battery.



What a way to spend the day. N7SFI, making contacts through the AMRAD-OSCAR 27 satellite.

Our plans were finalized, but my dentist intervened. He extracted all four of my wisdom teeth on the Friday before Field Day. There is nothing that increases CW speed like not being able to speak clearly. Murphy struck 5 minutes into the event when the 40 meter sloper snapped as I struggled to free it from a tree. We finally got on the air with a patched antenna. I ended up doing most of the operating because John hates CW and we had trouble making contacts on 10-meter sideband with less than 5 W. He did, however, pick up a few contacts on VHF/UHF FM.

We decided to tear down on Saturday night because of Sunday schedules, and the fact that my jaw was sore and swollen. We had a great time, though, and are ready for more next year.

W4VA, 2AB, Virginia

June 28, 1997, dawned warm, but with very low humidity. It looked like the weather gods were going to be kind to us this year.

We retrieved the gate key from the Airlie Conference Center and began our set-up at about 1315 UTC. We had the mast for the CW position in the air by about 1400 UTC. It was used to support one of K4LLQ's tape-measure antennas. KI4RO was unable to get his laptop to function, so the CW position had to resort to paper and pencil logging. N7DC provided the shelter of his RV and the CW position was on the air at 1800 UTC. (A special thanks is due for K4EU and N3KTO for coming by and helping us to man this position and keep it on the air.)

We then began erecting W4NFR's 40/80-meter three-element wire beam near the SSB position. The station itself was housed in a very nice Airstream trailer provided by KD4CAJ. From all indications, in spite of the poor propagation, the antenna seemed to work pretty well.

Setting up the triband Yagi—donated to the club by N3ND prior to his departure from Florida—was a major undertaking. We decided to use a 20-foot extension ladder as a mast support. We got the rotor mounted and raised the ladder. We then threw a rope over the top and hoisted the Yagi into position. Then someone convinced Leon, KE4TSP, to climb the ladder and drop the Yagi into the rotor. It became apparent that Leon, in spite of a Herculean effort, was not going to be able to accomplish the task. Maybe we should get a helicopter to come by and drop it in for us!

We decided to lower the support, attach the Yagi to the rotor on the ground, and then raise the whole thing into place. Darn, it's getting close to 1800 UTC! We recruited AB4YK's pickup to provide the horsepower needed to pull the entire system into the air. Success! The tribander was in the air by about 1745 UTC. Leon again scurried up the ladder and oriented the Yagi for us. KI4RO brought over the laptop, but couldn't get it to boot up. Fortunately, Peter, KF4QMY, vol-

unteered to run home and retrieve his laptop.

On our VHF position we had a 6-meter beam from AD4IW and 2-meter beam from AB4YK. We decided to use another 20-foot extension ladder to support these antennas. KB4USU, KF4RMM and KF4NYZ manned the VHF position while KF4NYZ took care of the Novice/Tech station. Sheila was able to keep both of these stations operational for at least 75% of the 24 hour period. She kept her troops fed, watered and on the air. Thanks, Sheila!

We did pretty well with the club's first-ever QRP Field Day. We managed 180 QSOs, 162 CW QSOs, 23 VHF QSOs, 5 Novice SSB QSOs, and 16 Novice CW QSOs and packet QSOs. N4YXW got our 5 natural-power QSOs for us. The city and county both proclaimed the week to be Amateur Radio Week.

KA7G, 4A, Montana

This was the first Field Day for our new club and the results were outstanding. We had lots of good press and a very good turnout for the event. Everyone operated and we had participants ranging in age from 8 to 84. We were not without Murphy's intervention, however. During the preceding weekend our area experienced heavy rains resulting in major flooding. Some areas received as much as 22 inches of rain. This necessitated a last-minute location change and renomination of everyone. Also, as evening began to arrive on Saturday, so did thousands upon thousands of mosquitoes. All last-minute changes are not bad; our club call sign arrived in the mail on the day before Field Day. We didn't score huge numbers of points, but everyone considered it a great success!

W8BAP, 3A, Ohio

No one could remember when the last "old fashioned" Field Day was organized by the Scioto Valley Amateur Radio Club. Some believed it had been more than 10 years since the club had ventured away from its clubhouse for the event. This year would be different. The Field Day committee decided that it was time to get the club out into the field! The club met and agreed; this year W8BAP would be "A" class, generators, tents, bugs, sun, dirt, and no air-conditioned clubhouse!

President Betty Walsh, WB8GZM, described how much she enjoyed the last old-fashioned Field Day she had participated in so many years ago. Before the meeting adjourned, Mary Turner, K8KX, located some wire in the back of the clubhouse. She gave it to Bill Dean, KA8MID, and asked if he could make up some dipoles. The club members allocated funds to be spent for food, as well as for gas for the generators. But if a Field Day station became a reality, would anyone show up to operate?

On the morning of the big day, our Field Day committee drove to the base of a fire tower that was to be our site. They found more than enough members ready and eager to set up the station. During the event itself,



The YLs got involved, too. Sonia, NØYSZ, makes a contribution. Rumor has it the YLs made more contacts than the OMs.



Nancy, N7LW, is busy operating under the pines.



Two members of the Lee DeForest Amateur Radio Club man the information table. There were 42 participants in this 4A operation.

more than 25 members and visitors came to the W8BAP site. That's *twice* the number of members who ever attended the last two Field Days at the "comfortable" clubhouse!

Orange Co RACES					Non-Club Group				Murray State Univ ARC						HOTARC				Sumter Co ARC						
N6YL	903	2	34	3,582	N2MO	730	2	21	3,026	NNJ					W5ZDN	675	2	20	2,194	NTX					
Milford ARC					Audrain ARC										Carbon Co ARS				North Georgia College ARC						
W8SDL (+WDMGL)	889	2	14	3,578	NU9H	770	2	15	3,024	MO				Central KS ARS	K7CZU	646	2	7	2,194	WY					
Cal Poly ARC					Dickson County ARC									W0CY (+KA0ERP)					Tampa ARC						
N6CP	1199	2	18	3,570	NY4N (+KF4CSU)									632	2	24	2,590	KS	W4DUG (+KE4SFA)						
Downey ARC					661	2	10	3,008	TN					K5QHD	646	2	25	2,590	NTX	W0AFG					
W6TOI	908	2	51	3,560	Candlewood ARA									W1QI	937	2	25	2,990	CT	W0AFG					
Hendricks County ARS					W1QI	937	2	25	2,990	CT				WE5L (+K85PWK)					W10KY	555	2	10	1,824	CT	
KE9R (+KB9MWE)					Juniatia Valley ARC									941	2	29	2,584	AR	Chain O Lakes ARC						
921	2	8	3,552	IN	K3DNA (+N1HEF)									Trojan ARC					K8Z0	396	2	45	1,822	MI	
St Clair County ARES/RACES					692	2	14	2,986	WPA					W0WOB (+KB0LGX)					W3MRC (+W42MNU)						
KE4EFI (+KB4SBM)					San Angelo ARC									781	2	10	2,582	KS	W8AX	513	2	11	1,822	MI	
1218	2	40	3,552	AL	W5QX (+N8RWBW)									Anaheim ARA, Garden Grove Elks RC					W4TRC	491	2	31	2,166	TN	
Penn-Mar					877	2	26	2,970	WTX					K6SYR	567	2	28	2,570	ORG	PAFB Mars Base Support Team					
W3MUM	968	2	20	3,548	MZM									K4OGB	809	2	21	2,568	NC	K4FD	470	2	13	2,144	SFL
Texas Instruments/Stafford ARC					K8TV	728	2	8	2,960	OH				K4OGB	809	2	21	2,568	NC	North Franklin ARS					
W5TI	1016	2	9	3,530	VEGRAC	621	2	15	2,958	AB				Albemarle ARC					NF2AR (+KB2ZGV)						
EARS					David Sarnoff RC									W4ATFZ	732	2	30	2,564	VA	434	2	8	2,144	NNY	
N6WB	876	2	11	3,520	N2RE	727	2	25	2,958	SNJ				Univ. ARC					Channel IS ANG ARC						
Ares Dist 22					Claremont RA									NTUJ	569	2	12	2,554	WY	KF6CVK (+KC6UOA)					
N0AUS (+KC0ALS)					N6RH (+KC6ZOW)									Bloomington ARC/Indiana ARC					639	2	10	2,136	LAX		
751	2	14	3,520	CO	942	2	55	2,912	ORG					W9INL (+N9PTG)					Non-Club Group						
NEWS/PICS					Appalachian RAA									596	2	27	2,550	IN	CG6GR	497	2	10	2,128	AB	
W5VAD	902	2	28	3,514	AA8V	586	2	11	2,910	MDC				Brightleaf ARC					Texoma ARC						
Rancho Cucamonga ARES/RACES					Augusta ARA									W4AMC (+KD4AUJ)					K5GQD	436	2	15	2,120	NTX	
W6KK (+KE6SCP)					W1TLC	1012	2	13	2,906	ME				640	2	25	2,512	NC	Iowa City ARC						
1853	1	21	3,468	ORG	PRARL									RAC of Knoxville					W0JVJ	704	2	25	2,120	IA	
Coastside ARC					KP4ES	579	2	5	2,906	PR				W4BBB	553	2	66	2,492	TN	San Juan Co ARS					
W46TOW	910	2	20	3,456	FARC									KG4FD	1036	2	10	2,472	KG4	K17YU (+KC7TJ0)					
Tallahassee ARS					W6TO	851	2	15	2,906	SJV				GARC					513	2	14	2,118	WWA		
K4TCH (+KE4TXX)					Nittany ARC									Liverpool ARC					Central Jersey RA						
783	2	30	3,442	NFL	W3YA (+N3PGA)									W2CM	893	1	10	2,465	WNY	N2CJA	714	2	30	2,116	NNJ
Baylor ARC					869	2	18	2,904	WPA					South Bay ARC					W2CWW	590	2	20	2,106	NLI	
WA5BU	633	2	9	3,432	Captain and Crew									W6ATT (+KA6ZTO)					Edmond ARS						
Greater Cincinnati ARA					K1D1I	1070	2	30	2,904	CT				604	2	25	2,456	LAX	N5OL	443	2	59	2,104	OK	
W8DZ (+KC8DWR)					Geezer ARC									K4ROA	588	2	16	2,452	VA	Brandon ARS					
633	2	25	3,410	OH	N6FOF	562	2	12	2,904	SV				SMART					K4TN (+KE4YBB)						
St Peter ARC					Morgan County RAMCRA ARC									467	2	60	2,100	SFL	SE Michigan Mercury ARA						
KB0SWK (+KB0DYP)					AARZ	648	2	25	2,890	IN				741	2	100	2,864	UT	W1VR	327	2	3	2,094	MI	
770	2	16	3,392	MO	MI ARA									696	2	14	2,420	NC	Brazos Valley ARC						
Non-Club Group					W8USA	940	2	24	2,890	MI				Albuquerque ARC					N5XZ (+N5UOG)						
KF7E (+KA5UUL)					North Providence ARC									N5VA	544	2	108	2,410	NC	467	2	54	2,092	STX	
1161	2	3	3,392	NM	N2XJ	790	2	19	2,874	NNJ				South Hills ARC					W19R	327	2	3	2,094	MI	
Big Bend ARC					Northwest Arkansas ARC									W3WH (+N3VWF)					Neptune ARC						
K5FD	1052	2	14	3,378	W5HF	780	2	23	2,868	AR				741	2	100	2,864	UT	N2GT	413	2	40	2,078	NNJ	
Big Spring ARC					Utah ARC									Telephone Pioneers of America					VEZCP	506	2	14	2,402	QC	
W5AW	1258	2	25	3,350	W7SP (+KC7AWUJ)									VEZCP	506	2	14	2,402	QC	K8PI	441	2	21	2,074	OH
Fox ARC					Fullerton RC									K1CL (+N1GRC)					OMA	507	2	9	2,398	EMA	
KE9A (+N0PPW)					W6ULI (+KB6CMO)									Lehigh Valley ARC					W3OI	807	2	27	2,384	EPA	
914	2	25	3,336	ND	808	2	35	2,860	ORG					W3OI	807	2	27	2,384	EPA	Irving ARC					
Rockingham Amateur Two-Talk Soc					Mountain Air RC									W4AE	736	2	3	2,854	NC	N5BB (+KA5OZC)					
N4IV (+KF4CLT)					W4AE	736	2	3	2,854	NC				Olympia ARC					574	2	40	2,382	NTX		
757	2	45	3,332	NC	Bartlesville ARC									N77H	483	2	40	2,364	WWA	The Brake Light Net					
Minden ARA					W5NS (+KC5MPD)									741	2	100	2,864	UT	KE40AR	713	2	16	2,350	TN	
N5RD (+KB5SUE)					Wantage RACS/ARES									Wantaugh ARC					W2VA	530	2	23	2,332	NLI	
74	2	45	3,324	LA	W2AESL	490	2	4	2,840	NNJ				W2VA	530	2	23	2,332	NLI	Burlington ARC					
Montgomery ARC					Straits Area ARC									W1KOO (+N1PDL)					458	2	25	2,326	VT		
W4AP (+N4WVV)					W8GQN	870	2	17	2,834	MI				RRRA	574	2	40	2,382	NTX	RRRA	574	2	40	2,382	NTX
873	2	48	3,304	AL	Bullihars									N77H	483	2	40	2,364	WWA	N5VA	544	2	108	2,410	NC
Mesilla Valley RC					KY4KY (+KE4AWY)									741	2	100	2,864	UT	W3WH (+N3VWF)						
N5BL (+KC5IDY)					Non-Club Group									RRRA	574	2	40	2,382	NTX	W3WH (+N3VWF)					
919	2	27	3,290	NM	K0GN	708	2	3	2,826	MO				N5VA	544	2	108	2,410	NC	W3WH (+N3VWF)					
Greater Norwalk ARC					NASA Goddard ARC									South Hills ARC					W3WH (+N3VWF)						
W1NLK (+N1ZEF)					W3ANAN (+KA3ZYX)									W3WH (+N3VWF)					W3WH (+N3VWF)						
816	2	40	3,270	CT	678	2	14	2,814	MDC					Lehigh Valley ARC					W3WH (+N3VWF)						
Pine State ARC					MARC									Lehigh Valley ARC					W3WH (+N3VWF)						
N1ME (+N1MDZ)					W5EJK	1006	2	25	2,798	OK				Lehigh Valley ARC					W3WH (+N3VWF)						
873	2	34	3,236	ME	Talladega RAC									Lehigh Valley ARC					W3WH (+N3VWF)						
Pecos Valley ARC					N4WNL (+KE4FRZ)									Lehigh Valley ARC					W3WH (+N3VWF)						
K5LWU	731	2	20	3,236	1061	2	40	2,790	AL					Lehigh Valley ARC					W3WH (+N3VWF)						
Richmond ARG					Charleston ARC									Lehigh Valley ARC					W3WH (+N3VWF)						
VE7RR	818	2	17	3,232	W4USN	683	2	29	2,748	SC				Lehigh Valley ARC					W3WH (+N3VWF)						
Green Mountain Wireless Soc					Southern Appalachian WS									Lehigh Valley ARC					W3WH (+N3VWF)						
W1GMM (+KA1OLE)					KTBJ	1174	2	100	2,748	WV				Lehigh Valley ARC					W3WH (+N3VWF)						
827</																									

WTRA					High Sierra Seniors					Darke-Miami old Tyme ARC					QCWA 162 Chapter					Dallas ARC						
KF4ADJ	455	2	23	1,518	VA	W6ISO	387	2	3	1,124	SCV				KB9LUJ	64	5	13	1,045	WI	W5FC	1366	2	32	4,732	NTX
Arrostook ARC						Quad Sounds ARC									Water Tower Hill Operation						CRA Brownsburg					
K1FS (+N1WV)	254	2	23	1,504	ME	VO1QS	224	2	10	1,118	NL				WY2Y	27	5	4	730	VT	W2CW	1138	2	17	4,690	QC
Non-Club Group						Eagle Lake ARC									Canadian Broadcasting ARS						Twin Cities Repeater Club					
AE4UK	469	2	15	1,502	KY	WC2T	550	2	4	1,100	EPA				VE7CBC	25	5	3	435	BC	W0BU (+N0MQL)					
University of Oklahoma ARC						Radio Amateur Downstate Ill Org																				
W5TC	451	2	14	1,502	OK	W9GH	160	2	18	1,094	IL															
Gaston Co ARS						Drummins ARC																				
K4TP	335	2	12	1,492	NC	WA2AAZ	156	2	21	1,094	WNY															
Bill Gremlinn Memorial RC						Vill. of Melrose Farm ES																				
K4SEX	389	2	20	1,488	GA	KB9OMV	142	2	30	1,094	IL															
Bonner Co ARES						Greater Mason County ARS																				
N7GHV	630	2	8	1,460	OH	KF4BRO	346	2	25	1,092	MI															
CCARC						Katy ARS																				
N3FYD	479	2	8	1,458	WPA	KCSUJM	340	2	16	1,088	STX															
Auburn ARC						Lunenburger County ARS																				
K2BFB (+K2BFB)	171	2	24	1,446	WNY	VE1LUN	241	2	6	1,082	MAR															
Snohomish County Hams Club						Viking ARS																				
WA7LAW (+K87JVN)	285	2	14	1,442	WWA	WA0CJU	363	2	12	1,074	MI															
Placenta ARES/RACES						Convoir ARC																				
AC6LC	320	2	14	1,440	ORG	W6UJG	195	2	14	1,072	SDG															
South Baldwin ARC						Gies ARC																				
W4INU	317	2	12	1,426	AL	KF4SCQ	195	2	12	1,070	VA															
Mobridge Area ARC						Orchard City ARC																				
K0ERM (+N0XOG)	191	2	6	1,408	SD	VE7OGO	318	2	25	1,068	BC															
Athens RC						Honeywell Hams																				
N4ALE	429	2	25	1,392	GA	KJ7LT	484	2	23	1,068	AZ															
Manatee ARC						West Seattle ARC																				
K4GG	532	2	10	1,364	SFL	W7AW	266	2	9	1,054	WWA															
FORCE						Huntington Co ARS																				
K3UAV	253	2	4	1,360	MD	K9HC	275	2	12	1,050	IN															
Temple ARC						Southern Sierra ARS																				
W5LM	280	2	15	1,360	NTX	W7GEN	131	2	10	1,050	SJV															
Vackson Hole Area ARC						Glynn ARS																				
N7UJE	320	2	10	1,352	WY	K4TVE	303	2	15	1,046	GA															
Lorain Co ARC						MARJA Net Group																				
KC8BD	325	2	23	1,350	OH	AB7JF	118	2	8	1,036	AR															
Flambeau ARC						Scott County AR Emerg Serv Club																				
KQ9J	454	2	15	1,350	WI	N4COJ	210	2	10	1,030	KY															
Simcoe County AR Enthusiasts						Clinton Iowa ARC																				
VA3SDX	370	2	7	1,348	ON	W6CS	212	2	14	1,024	IL															
Foothills ARC						Valley ARS																				
W3LWW (+KA3NZH)	361	2	15	1,328	WPA	W1HAD	241	2	25	1,024	CT															
O'Brien County ARC						Mt Valley ARC																				
W0CON	263	2	4	1,326	IA	WA2AEA (+K62YYZ)	306	2	18	1,010	NNY															
Mission AR Emergency SS						Robbinsdale ARC																				
VE7MIS	405	2	5	1,310	BC	K3BKG	269	2	6	996	EPA															
Atchafalaya Amateur DX Assn						Burkburnett ARO																				
NT5K	341	2	20	1,304	LA	K7CMH	221	2	14	990	NTX															
Orange County ARC						ZRR Repeater Group																				
W2HO (+K82MTA)	248	2	15	1,300	ENY	VE3ZRR	165	2	12	990	ON															
Temiskaming ARC						Langlely ARS																				
VE3CTT	284	2	6	1,300	ON	VE7LGY	293	2	10	986	BC															
Walton ARC						Houston ECHO Soc																				
N4SIS	389	2	6	1,292	NFL	W5ECO	343	2	14	986	STX															
Tennessee Tech ARS						Southwick RACES/ARES																				
WA4UCE	234	2	8	1,292	TN	KB1CDL	135	2	10	980	WMA															
The Blue Ridge Video & Digital Soc						Pt Pierce ARC																				
N2EDE	343	2	12	1,290	VA	W4AKH (+K04UZX)	188	2	15	976	SFL															
Seaway Valley ARC						Tristate ARS																				
VE3VSW	356	2	8	1,284	ON	W8VA (+W8ZER)	185	2	35	974	WV															
Salem Area ARC						Greater Collegedale Adventist RC																				
K8BTP	257	2	32	1,264	OH	AB4HL	237	2	20	974	TN															
Fort Armstrong Wireless Assn						Oregon Trail ARC																				
AA3PH	228	2	15	1,262	WPA	KB0UAC (+K80UAC)	133	2	12	966	NE															
Hualapai ARC						Hub City ARC																				
Marion ARC						WB0JZZ (+N9TDE)	333	2	10	966	SD															
W8GVB	226	2	21	1,256	OH	Rowan ARS																				
ARA of Bremont						W4EXU	319	2	7	946	NC															
W7VE	219	2	12	1,250	WWA	Pen Bay ARC																				
Princeton ARS						KE1DY	169	2	15	942	ME															
W4KBL	269	2	28	1,244	KY	CVARC/MARC																				

The 440 Group WU9Z (+KB9JEL) 789 2 20 3,166 IN	Wood County ARC KC5ORS (+NSYXO) 855 2 10 2,412 NTX	Nanaimo ARA VE7NA 469 2 14 1,870 BC	Skyline ARC KZDN 561 1 33 1,358 WNY	Greens Ferry ARC KB6FO 185 2 17 706 AK
Bill Hoehl Memorial FDG W4UOT (+KE4LPL) 872 2 35 3,158 TN	Massasoit ARA W1MIV 638 2 5 2,380 EMA	Burlington County RC K2TBL 432 2 23 1,868 SNJ	GCERC ARC W4MLD 335 2 7 1,352 GA	Hermistons ARC KC7KUG (+K7MSP) 242 2 20 690 OR
CSRA N9TM (+KB9NZU) 986 2 55 3,134 IL	Surrey ARCS VE7DK 649 2 9 2,376 BC	Elgin County ARS VE3RSE 418 2 12 1,868 ON	Nestle ARC & Crescenta Valley RC WF6W 267 2 14 1,350 LAX	Waterville Area WA WA1WA 141 2 10 682 ME
Alford Memorial RC W4BOC 718 2 50 3,116 GA	Non-Club Group VE3KRG 448 2 27 2,356 ON	Tri-City ARC NU1D 428 2 30 1,866 CT	Non-Club Group W7AQ 350 2 30 1,348 EWA	The Ober Family CG WB6CGZ 125 2 3 650 LAX
Wiley Radio Club of Oregon W7PXL (+KB7KLT) 708 2 25 3,082 OR	Northwest Wireless Assn KC7YGA 769 2 12 2,350 WWA	Seneca RC W8ID 289 2 20 1,866 OH	Arginne ARC W9ANL (+KF9FGD) 270 2 20 1,340 IL	Pioneer ARC K0JFN 97 2 25 646 NE
St Charles ARC NF0Q (+N0PTN) 892 2 31 3,080 MO	Texas EAC W5SI (+KC5VNL) 504 2 15 2,326 STX	NewVector ARG NV7P 438 2 10 1,860 WWA	Alexandria RC W4HFI 312 2 8 1,332 VA	North Platte Progressive ARC KB7YSG 196 1 20 612 NE
Troy ARA N2TY (+KB2SPM) 908 2 50 3,048 ENY	Bristol ARC W4UD 574 2 30 2,324 TN	NPSARC K6LY (+KF6GZE) 399 2 15 1,854 SCV	Radio Amateurs of Corry W3YXE 239 2 10 1,332 WPA	Yadkin Valley ARC N4AAD 76 2 4 564 NC
Yonkers ARC W2YRC (+N2WIE) 622 2 48 3,042 ENY	Runestone ARC AA0EV 468 2 22 2,318 MN	Winchester Pioneer ARC AA4HF 563 2 30 1,818 KY	Carteret County ARS W4YMI (+KF4GID) 254 2 22 1,326 NC	Muscatine ARC AB0M 97 2 7 242 IA
Chat-Ham ARC NE4T (+KE4OPO) 978 2 17 3,004 NC	Ericsson Triangle ARC W4EUS 824 2 12 2,306 NC	Sandusky Valley ARC WBNC 345 2 10 1,818 OH	Highland Lakes ARC N6RRJ 18 1 10 18 STX	3A Commercial Newton ARC/Hesston College ARC N0NK (+N0LQU) 2457 2 25 7,588 KS
Simi Settlers ARC WA6AYI (+KD6UQB) 859 2 26 2,980 SB	Grumman ARC WA2LQO 719 2 15 2,298 NLI	Sky Valley ARC W7SKY (+KC7UQU) 856 2 25 1,810 WWA	Warren County RACES N8GE 257 2 19 1,316 OH	Aiken Contest Club N2ZZ 1332 2 5 4,506 SC
Kalvert ARA KD4D (+N3ZZZ) 824 2 25 2,954 MDC	Rainier Mountain ARC WA2SNA 830 2 10 2,296 NNJ	Cape Ann ARA W1RK (+N1VTY) 403 2 27 1,784 EMA	Clearlake ARC W6ULT 290 2 5 1,294 SF	Tri-Town RAC W9VT (+N9WGD) 947 2 35 2,820 IL
Lincoln Trail ARC AE4RG (+KB4TL) 959 2 33 2,950 KY	Lancaster ARC W2SO 750 2 25 2,292 WNY	Independent RAC N8XKF 461 2 20 1,760 OH	Scioto Valley ARC WB8AP 343 2 24 1,294 OH	High Point ARC W4UUA 633 2 26 2,556 NC
31 ARG N4AZY 778 2 4 2,912 TN	Mckean County ARC W3VV 521 2 12 2,282 WPA	CVARs WA7UHD 477 2 27 1,756 WWA	Kingston ARC VE3UEJ 157 2 8 1,282 ON	Serious Hams ARC K4PNS 901 2 16 2,342 NFL
Lagunatics K6PD 610 2 6 2,910 SDG	BARS N3JY 612 2 12 2,264 EPA	Scranton Pocono ARC K3CSG 434 2 17 1,752 EPA	Chatham ARC A10E 177 2 15 1,282 KS	Monroe Co ARC AA5PV 771 2 6 1,948 MS
Golden Triangle ARC ND6N (+KB6DXD) 651 2 25 2,894 ORG	Hot Spicy Mustard KE4HSM 905 2 7 2,260 TN	Cape Ann ARA W1RK (+N1VTY) 403 2 27 1,784 EMA	Barstow ARC WA6TST 269 2 15 1,278 ORG	Blount County ARC W4BLT 495 2 15 1,490 AL
Abbotsford ARC VE7ECC 713 2 15 2,884 BC	Stable ARC W1DPN 353 2 7 2,252 EMA	North Bay ARA K6LI 392 2 12 1,660 EB	Yates ARC AB2DS 229 2 11 1,278 WNY	Black Fly ARC W2VJW 286 2 14 1,170 NNY
Centerville Area ARC NY0E 773 2 35 2,884 IA	Lake Isabella ARA WY6Y (+KE6KPI) 510 2 12 2,220 SJV	New Mexico State U ARC W5GB (+KB5GZU) 430 2 6 1,650 MN	AB2DS 229 2 11 1,278 WNY	Toledo Bend ARC W5ZD (+KC5ZFM) 349 2 17 1,146 STX
Pasadena RC W6KA (+N6WUH) 926 2 73 2,882 LAX	Non-Club Group VE3PSH 686 2 20 2,214 ON	Fort Wayne RC W9TE 637 2 32 1,684 IN	Wayne Co ARS K4CYP 315 2 21 1,208 NC	Zamorra Ham Radio Unit WU4Y 341 2 22 1,066 AL
Non-Club Group K5QQ 685 2 15 2,864 NM	Fenton Area ARC W8VHB (+KC8CUA) 684 2 14 2,210 MI	GCARB W9EBN 422 2 20 1,662 IN	Red River ARC W3MOI 299 2 24 1,204 NTX	Big Bear Lake Group N3MCO 259 2 6 1,018 WV
Ascension ARC K5SLC 1161 2 40 2,864 LA	Jones County ARC NN0L 610 2 14 2,198 IA	North Bay ARA K6LI 392 2 12 1,660 EB	Stubblefield K04OT 477 2 15 1,190 KY	Desoto ARC W4M1M 60 2 18 620 SFL
ARCA/SCARS NC6J (+WA6YRF) 808 2 48 2,862 SV	Poway ARS N6PWY 584 2 20 2,194 SDG	New Mexico State U ARC W5GB (+KB5GZU) 430 2 6 1,650 MN	Central Ontario ARC VE3BNI (+VE3BNI) 387 2 14 1,186 ON	4A Battery NJ QRP Club N2CX 309 5 8 3,430 NNJ
Radio Amateur Soc of Norwich N1NW 723 2 17 2,844 CT	Non-Club Group W6PWY 584 2 20 2,194 SDG	Naval Research Lab ARC W9EW 338 2 19 2,162 MDC	Festival City ARC VE3FCG 388 2 13 1,176 ON	4A Cherryville Repeater Assn W2GD (+N2RDL) 4849 2 55 15,824 NNJ
Spokane Co ARES/RACES W7GBU (+N7VRF) 684 2 30 2,832 EWA	Pallades ARA W9BPT (+N9XBG) 456 2 10 2,168 IL	Schoharie County ARA WA2ZWM 679 2 11 2,158 NNY	Radio Amateur Educational Soc VE6RES 192 2 18 1,176 AB	Wellesley ARS W1TKZ 148 2 12 1,146 EMA
ARC of Parker County WK5I 616 2 16 2,810 NTX	West Jersey DX Group W2JDX 442 2 8 2,154 NNJ	The 415 Wireless Soc. WB6ZY 696 2 9 2,158 EB	Central Maryland ARC K3BLR 271 2 14 1,142 MDC	Union County ARC N4SHY 268 2 13 1,136 SC
Mountain ARC W3YMW (+N3RVV) 850 2 19 2,788 WPA	S PA Com. Group K3AE (+N3TFZ) 513 2 22 2,136 EPA	W6NZY 696 2 9 2,158 EB	N4SHY 268 2 13 1,136 SC	Southern CA Japanese Ham Club K6JP 412 2 8 1,128 LAX
Winnipeg ARC VE4B 722 2 17 2,784 MB	Charlotte ARS W4OQ 463 2 42 2,126 SFL	W6NZY 696 2 9 2,158 EB	Ardmore ARC W5JP 154 2 20 1,126 OK	Dalton ARC W4DRC 163 2 42 1,126 GA
Harvard Repeater Club W1DVC (+N1XWA) 570 2 19 2,762 WMA	KE6F 587 2 10 2,108 SV	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	W4DRC 163 2 42 1,126 GA
Walla Walla Valley ARC W7DP (+KC7JNQ) 789 2 28 2,730 EWA	Palmico ARC W4RHU (+K4BIV) 536 2 26 2,106 NC	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Alexander County ARES/RACES W4AW 186 2 14 1,116 NC
Alliance ARC W8LRC (+N8MAA) 745 2 24 2,724 OH	Satellite ARC W6AB (+K6AYRJ) 705 2 35 2,104 SB	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Friends of Mt San Jacinto AC6XK 218 2 7 1,108 ORG
Toronto ARC VE3TNC 1346 2 30 2,692 ON	Saginaw ARA K8DAC 558 2 20 2,104 MI	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	White Water Valley ARC KB9KUY 206 2 40 1,100 IN
Rip Van Winkle ARS WD2K (+KC2BNE) 573 2 50 2,692 ENY	Land Rovers ARC W4ZJHN 557 2 5 2,096 NNJ	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	DACAR AD8N 331 2 12 1,062 OH
Davenport RAC W0BXR (+KB6GOK) 789 2 60 2,690 IA	Pocono ARC W3PRK 730 2 12 2,092 EPA	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	38s RPTR Group W8F 461 2 5 1,056 OH
Loyalist City ARC VE9LC 717 2 35 2,664 MAR	Cape May Co ARC N2CMC (+N2JAI) 592 2 25 2,088 SNJ	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	SCARE KM7P 238 2 5 1,050 OR
Columbia AR Project K7EJ 548 2 10 2,642 EWA	Jackson ARC W5PFC 607 2 30 2,076 MS	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Joplin ARC W0IN 228 2 12 1,048 MO
Strangers and Pilgrims ARK N3NWA (+N3WME) 732 2 80 2,614 EPA	Maple Ridge ARC VE7CML 661 2 12 2,076 BC	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Gladwin Area ARC KB8ZML 173 2 35 1,046 MI
STERN/GPVHFS W3SAT 608 2 10 2,614 WPA	Yellow Thunder ARC WB9FDZ (+A9QJF) 436 2 20 2,072 WI	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Cascades ARS W8JXN 308 2 20 1,036 MI
Broad River ARC NG4Q 1002 2 12 2,610 GA	NBC-TV RC N2EW 460 2 3 2,070 LAX	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Lake Park Area ARC A9PN 217 2 14 1,034 WI
San Francisco ARC W6PW 533 2 7 2,608 SF	N2EW 460 2 3 2,070 LAX	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Lake Area RK K0ATAH 190 2 10 1,028 SD
Lincoln County ARES K1LX 665 2 16 2,596 ME	Waterbury ARC W1LAS 673 2 20 2,068 CT	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Garden City Area Amateurs N0UMP 190 2 3 1,020 MO
EFFECT N8MVV (+N8MCMZ) 664 2 13 2,568 MI	Tolersville ARC W4JTG 519 2 16 2,052 VA	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Dubois Co Emergency Management N9BEJ 196 2 11 1,014 IN
ICARS AE4RL (+WD4LXC) 825 2 26 2,556 NC	Marple-Newton ARC K3MN (+N3FRF) 532 2 37 2,048 EPA	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Columbia ARA K3CJL 196 2 15 1,002 MDC
Mammoth Cave ARC KY4X 640 2 31 2,544 KY	TLARC KJ5XC 420 2 40 2,046 AR	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Manhattan Area ARS K0UHF (+K0A0AT) 147 2 14 994 KS
Blue Mountain ARC VE3MTR 753 2 28 2,536 ON	KJ5XC 420 2 40 2,046 AR	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	LCARS W6ZK (+KE6HJM) 195 2 17 990 SF
Treasure Valley RA K7OJL 715 2 15 2,510 OR	Kishwaukee ARC WA9CJN (+N9ZNA) 382 2 20 2,046 IL	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Garrett County ARES AA8QS 359 2 9 962 MDC
VE3OST 749 2 15 2,506 ON	Portsmouth ARC W4POX 480 2 35 2,038 VA	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Calaveras ARC W8YGA 199 2 34 960 SJV
Ottawa Valley Mobile RC VE3RAM 462 2 22 2,474 ON	Quad Counties ARC N3QC 459 2 6 2,030 WPA	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	W8YGA 199 2 34 960 SJV
Northern RI RC W1NRI (+N1QVJ) 622 2 18 2,472 RI	Metropolitan Rep. Assn. & Wormhole K4PU (+KC4AZV) 352 2 40 2,022 SFL	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Zephyrhills Area ARC K4F4AD 176 2 9 952 SFL
Non-Club Group K2BNL 574 2 20 2,458 NLI	San Lorenzo ARC W6AOK 529 2 15 2,016 SC	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Mountain Repeater Assn. K6VE 167 2 5 942 LAX
W3CSL 752 2 40 2,442 WPA	W3SAT 608 2 10 2,614 WPA	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Washington Amateur Communications AA3GM 156 2 4 930 WPA
Linn County ARC N0LC (+KB0WCJ) 692 2 20 2,438 MO	Winnipeg ARC VE4B 722 2 17 2,784 MB	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Yucapa Valley ARC KF6LLS 394 2 7 896 ORG
Wabash Valley ARA W9UOU (+N9YNF) 612 2 12 2,436 IN	Georgian Bay ARC VE3OST 749 2 15 2,506 ON	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Hall of Science ARC WB2JSM 74 2 16 858 NLI
	Ottawa Valley Mobile RC VE3RAM 462 2 22 2,474 ON	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Non-Club Group VE2DMA (+VE2DMA) 104 2 5 856 QC
	Northern RI RC W1NRI (+N1QVJ) 622 2 18 2,472 RI	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Metropolitan ARC K8NOW 223 2 8 846 MI
	Non-Club Group K2BNL 574 2 20 2,458 NLI	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	C5 Computer Club K1TE 57 2 3 822 WWA
	W3CSL 752 2 40 2,442 WPA	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Tinoco ARC KB0ZAW 88 2 28 800 MO
	Linn County ARC N0LC (+KB0WCJ) 692 2 20 2,438 MO	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Top of MI ARC KB8MTN 126 2 16 764 MI
	Wabash Valley ARA W9UOU (+N9YNF) 612 2 12 2,436 IN	W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Valley of the Moon ARC W6AJF 255 2 30 736 SF
		W6NZY 696 2 9 2,158 EB	W5JP 154 2 20 1,126 OK	Hill Tops WB6AXW (+KE6JZK) 115 2 3 730 SDG

Columbia-Montour ARC W3CA 1368 2 12 4,628 EPA Watauga ARC K4CX (+KFAAFY) 1565 2 28 4,616 NC Rogue Valley ARC W70EK 1475 2 10 4,522 OR Piscataway ARC K2VOA (+N2WRK) 1436 2 30 4,436 NNJ GCARC W2MMD 1029 2 24 4,386 SNJ The Providence RA W10P 2465 1 15 4,243 RI Snake River ARC K7SI (+KBTJUKP) 1352 2 15 4,234 ID Mid-Atlantic ARC W3NWA 1265 2 39 4,056 EPA Hamilton ARC VE3DC 1222 2 15 4,046 ON Radio Forum KB3MI 1118 2 16 4,000 WPA SCATS WB6LR 1690 2 18 3,998 LAX FMARC W4LX (+KE4HXP) 1000 2 40 3,974 SFL Kokomo ARC W9GO (+N9XLT) 950 2 44 3,798 IN ARA of South West Florida K4FA 1249 2 14 3,590 SFL WCARS W4MOE (+K4DNZX) 953 2 49 3,586 NC North Shores ARC K6HAI 924 2 25 3,524 SDG Campbell Co ARC AC4YA 1073 2 35 3,460 TN Racine Megale Club W9UDU 935 2 41 3,452 WI ARTS W4CN 777 2 21 3,448 KY Dayton ARA W8BI 795 2 10 3,440 OH Crystal RC W2DMC 849 2 30 3,426 ENY Parkersburg ARK AA8UL (+A8AJL) 645 2 10 3,376 WV United ARC K6AA 1111 2 30 3,352 LAX London Bridge ARA AB7EM 1017 2 47 3,320 AZ Big Bear ARC K6BB (+KBYQY) 911 2 48 3,300 OR Maury ARC N4EO (+K4FICJ) 1016 2 50 3,210 TN Montgomery ARC KV3B 819 2 10 3,150 MD McKinney ARC WA5M (+N5OLE) 934 2 21 2,972 NTX Victor Valley ARC K6QWR (+K6BBLD) 1024 2 40 2,962 ORG Pioneer ARF KBZAM (+K6CARD) 663 2 33 2,948 OH Metropolitan ARC AE5AA (+N5OOI) 678 2 15 2,948 AR Coachella Valley ARC K6BSC (+K6BSC) 672 2 7 2,912 ORG Plattsmouth ARC KB0SMX (+K6CAUL) 540 2 30 2,902 NE Indiana CO ARC W3BMD (+N3SKB) 853 2 42 2,876 WPA Magnolia Repeater Assn/Lowndes ARC AA5MT (+N3WYU) 751 2 30 2,874 MS Chesapeake ARS KF4BCN 786 2 10 2,850 VA Intercity ARC W8WE 716 2 25 2,822 OH Titusville ARC KS4GP (+K80OQJ) 587 2 80 2,734 SFL Paoria Area ARC W9UVI (+N8M5F) 827 2 20 2,726 IL Monterey Park ARC K6GIP 916 2 14 2,640 LAX Hayward RC K6EAG 579 2 23 2,636 EB Natchaug ARC WE1Y 681 2 35 2,614 CT Silvercreek ARA W8WKY (+K6B0DKG) 732 2 20 2,600 OH Golden Empire ARS W6RHC (+K6FDJWJ) 616 2 23 2,554 SV Englewood ARS W4VV 666 2 16 2,454 SFL Midland ARC W8KEA (+N8NGQ) 818 2 17 2,418 MI Fallbrook ARC N6FQ (+K6DAKT) 481 2 10 2,308 SDG River City ARCS KF6ABN (+KE6YMZ) 613 2 75 2,296 SV Catalina Radio Club W7SA (+N6KIV) 627 2 22 2,288 AZ Yarmouth ARC VE1GX 386 2 20 2,264 MAR Indian River ARC W4NLX 569 2 25 2,262 SFL Des Moines RAA W0AK 535 2 30 2,228 IA Tri-County RA W0LUY 581 2 6 2,212 WI Marin ARC W6SG 506 2 25 2,138 SF Kauai ARC KH6E 630 2 35 2,016 HI 2019 ARC K8TKA 608 2 21 2,014 OH Beaver Valley ARA W3SGJ 640 2 17 2,002 WPA Northern AB RC VE6NC 523 2 28 1,950 AB Horseshoe ARC W3QZF 352 2 30 1,920 WPA Southern Counties ARA K2BR 338 2 20 1,880 SNJ Genesis ARS WF1M 264 2 23 1,860 EMA Middlesex ARC W1EDH 451 2 20 1,824 CT Island County ARC W7AVM 302 2 24 1,818 WWA Mon Valley CW ARC KB3BT 399 2 28 1,758 WPA Siskiyou County ARA KEYJH 284 2 25 1,736 SV Southern Berkshire ARC W1BAA 416 2 17 1,718 CT Madison-Oneida ARC W2MO (+N2VWX) 350 2 14 1,702 WNY Lee DeForest ARC W6OB 247 2 42 1,700 ORG Sunpartor ARC VE3SPR 509 2 12 1,694 ON Lawrence County Tennessee Skywarn AD4IA 394 2 25 1,694 TN Everglades ARC W4SVI 429 2 17 1,664 SFL Lotus/Kalayaan ARC AB6FH 463 2 45 1,626 LAX 205 Group K4YQ 359 2 8 1,584 MT Columbia County ARC KDX8B (+N8ZSW) 302 2 10 1,570 OH Sonra Swilers VO1AA 219 2 15 1,548 NL Panoramaland ARC K7JAR 370 2 15 1,526 EWA National Trail ARC NSUXZ (+N8OAL) 322 2 15 1,472 IL SCVARC VE1IE 244 2 17 1,448 MAR Bridgerland ARC W7IVM 339 2 20 1,434 UT Jefferson County RAC N2YQI 309 2 43 1,412 NNY Border ARF KB1BRN (+K1KHA,N1HJR) 205 2 20 1,372 VT Verde Valley ARA W7EI 484 2 55 1,348 AZ Skywide ARC VA3SKY 280 2 10 1,270 ON SMARTS WB0RMK 371 2 35 1,234 MN Elkhorn Valley ARC W0QFK 208 2 10 1,116 NE Milwaukee RAC W9RH (+W9RH) 241 2 34 1,016 WI Splinters K14JP 142 2 6 984 AL Western Colorado ARC W0RRZ 104 2 15 908 CO The Dazles Repeater Club & DX Assn W7FIO 87 2 6 874 OR Brantford ARC VE3BA 371 2 10 742 ON Loma Linda ARC W6FZV 206 1 10 506 ORG 4A Commercial South Georgia ARC W4F (+KE4MMW) 867 2 7 3,132 GA Plateau ARA/Black Diamond ARC NM8T (+K8ABLSE) 1046 2 32 2,772 WV Radio Assn of Western NY W2PE (+K82JUR) 807 2 19 2,412 WNY Jefferson County ARC W5SSV 507 2 47 2,048 STX LaGrange ARC AB4KE (+K4HJD) 270 2 15 824 GA 5A Battery Orange County RA W4EZ 660 5 22 5,915 NC North Coast ARC N8NC (+K8CUCI) 755 5 37 5,400 OH Central Oregon RA N7NK (+N7YBN) 655 5 26 5,195 OR Brockport ARK K2BRK (+N27JK) 379 5 13 3,875 WNY Johnson ARS AB4PP 181 5 30 2,495 NC 5A Huntville ARC K4BFT (+KE4CPJ) 4512 2 90 14,462 AL Palomar ARC W6NWX (+K6FLXJ) 3000 2 59 10,084 SDG Ak-Sar-Ben ARC K0USA (+N0WAV) 2723 2 43 8,182 NE Birmingham ARC W4CUE (+K4KZQ) 2232 2 85 7,686 AL Hoodview AR WB7QJW 2320 2 38 7,500 OR Virginia Beach ARC W4UG (+KE4JURC) 1689 2 105 6,248 VA Endless Mountains ARC N3EP (+N3MUJ) 2028 2 16 6,032 EPA Boeing Engineers ARS K7NWS (+N7EXO) 1336 2 125 5,210 WWA Smoky Mt ARC W4OLB (+K4PDQ) 1611 2 24 5,186 TN Dupage ARC W9DUP 1379 2 25 5,026 IL Livermore ARK W9A 1198 2 10 5,006 EB West Branch ARA W3AVK (+K83AWQ) 1284 2 27 4,858 EPA Ocean State ARC K1OS 1722 2 25 4,684 RI Monongalia Wireless Assn W8MWA 1226 2 30 4,466 WV Schenectady ARA K2AE 1138 2 10 4,418 ENY Santa Cruz County ARC K6BJ 1163 2 15 4,214 SCV K6BJ 1163 2 15 4,214 SCV W6CX 1376 2 47 4,032 EB Ill Valley ARC/Jacksonville ARC W9ACU (+K89KHU) 768 2 50 4,026 IL San Gabriel Valley RC K6ML (+K6TTR) 835 2 30 3,836 LAX Hams Having Fun in Kentucky AA4NJ (+KE4WHY) 961 2 57 3,804 KY Mt Tom ARA W1TOM (+N1JSK) 1177 2 30 3,786 WMA Northport Grumman RC W6PZ 1139 2 25 3,712 LAX CARS K8ZFR 855 2 18 3,692 OH Houston ARS NN0A 1226 2 17 3,574 STX Warren ARA W8VTD 1026 2 8 3,510 OH Great South Bay ARC W2GSB (+K82REZ) 853 2 63 3,460 NLI Butler Co ARPSG K3PSG (+N3JQW) 885 2 41 3,402 WPA Cambridge ARC VE3BHZ 960 2 7 3,276 ON Filipino-American ARS AF6P 1013 2 12 3,158 SDG North Hills ARC W3EXW (+N3WJL) 733 2 56 3,084 WPA Cambridge ARA W8VP 766 2 24 2,996 OH Clear Lake ARC K5HOU (+K5PSY) 871 2 172 2,960 STX Twin City ARC K9CV 1241 2 29 2,922 IL AA9JG RG NIGA 527 2 16 2,882 TN Coastline ARA NC1D 865 2 10 2,798 CT TLRA W2LI 636 2 24 2,784 NNJ Armadillo Gang W5LEX 803 2 25 2,780 STX London ARC VE3LON 686 2 50 2,704 ON Triple States RAC K8AN 616 2 30 2,638 OH Willmar Emergency ARC W0SW 776 2 14 2,588 MN Ventura county ARC K6MEP 640 2 25 2,582 SB York Region ARC VE3YA 776 2 40 2,538 ON Garlic Valley ARC W4UY 562 2 8 2,498 SCV Radio Club of Tacoma W7DK 666 2 18 2,398 WWA Deuel County ARC W0GC 571 2 18 2,382 SD Beloit ARC WA9EZT 825 2 11 2,350 WI West Gas ARS W4FWD (+K4CIK) 424 2 30 2,338 GA Arlington Comm League K9CIL 573 2 22 2,332 IL Stu Rockafellow ARS K8GUL (+K8DPL) 399 2 15 2,330 MI Niagara Peninsula ARC VE3VM 567 2 10 2,252 ON Spokane RA W7NBR 440 2 8 2,252 EWA Mid Atlantic DX and Repeater Assn W8ABC 582 2 15 2,146 MDC T-CARES N6BC 525 2 24 2,082 SVJ Corona PD Comm Spec Volunteers KN6KH 526 2 15 2,050 ORG Kern River Valley ARC W6LI 479 2 10 2,016 SVJ Big Rapids ARS KB8QOI 407 2 20 2,012 MI Eastern ARC VE3SAU 459 2 9 1,990 ON ARA of Hanson Hills N8AHZ 333 2 10 1,966 MI Portage ARC KJ3O 417 2 35 1,904 OH Rural ARA K7WIR 450 2 18 1,902 NV Denver RC W0TX 478 2 20 1,890 CO South Whidbey RC W7PN 280 2 10 1,764 WWA Muskegon Area ARC W8ZHO (+N8YME) 298 2 12 1,760 MI Warrensburg Area ARC W8AU 556 2 16 1,754 MO Capital City ARC W7TCK 353 2 55 1,702 MT Lakeway ARC N4PH (+KFAFTG) 379 2 34 1,668 TN Experimenters Alliance/Markham ESDA K9CZL 316 2 12 1,632 IL SEMARC W0CGM (+W0CGM) 156 2 7 1,570 MN Granville ARC/Falls Lake ARC N4NCT 317 2 19 1,434 NC SPARK KB9KUJ 203 2 10 1,346 WI Raritan Bay Radio Amateurs K2GE 259 2 25 1,336 NNJ Rockland Wireless RC KB2UYH 236 2 10 1,284 ENY Chesapeake Bay RA W43SFJ (+KA3CIM) 331 2 14 1,144 MDC Ebouaire ARC KB2WIM 209 2 12 1,124 NLI California Cluckers AC6YD 70 2 10 840 SF Wireless Woman of Vermont W1WWW 327 2 6 654 VT Non-Club Group W3CWC 307 2 10 614 MDC 5A Commercial NARA W8CS 1018 2 10 2,746 OH 6A Battery Zuni Loop Mt Exp Force N6GA 913 5 11 8,660 LAX 6A Cherryland ARC N8FD (+N8OUZ) 4034 2 42 13,306 MI Non-Club Group K2AA 4056 2 3 12,602 SNJ Wheaton CRA W9CCU (+N9LWP) 2884 2 82 9,690 IL South Pickering ARC VE3SPC (+VA3EOJ) 2100 2 35 7,826 ON Mike & Key ARC K7LED (+K87SDC) 2358 2 105 6,872 WWA Hazel Park ARC W8JXU 1728 2 40 5,572 MI North Fulton ARL KR4TG (+KF4KFE) 1755 2 53 5,276 GA Penn Wireless Assn W3SK (+K83BDS) 1442 2 10 5,224 EPA Bolingbrook ARS N9GH 1513 2 32 5,188 IL Phil-Mont Mobile RC W3EM 1191 2 25 4,762 EPA Central NH ARC N1LT (+N1XNU) 994 2 35 4,302 NH Clearwater ARS/St Petersburg ARC K4JMH 1189 2 100 4,246 SFL Kendal ARS W5XW (+K5CFSP) 913 2 15 3,708 STX Whitman ARC W1NPO 719 2 32 3,336 EMA Wilson ARC KR4FO (+K4DFXY) 696 2 18 3,196 TN Non-Club Group K8KRG (+K8AVTS) 830 2 20 2,660 OH Clayton ARES K4WZ 694 2 25 2,582 GA Fulton County ARC KB8CX 529 2 16 2,380 OH Beach Cities Wireless Society K6WO 558 2 23 2,364 ORG Toledo Mobile RA W8HHF 705 2 18 2,320 OH Quabog Valley ARC W1NP 410 2 15 2,090 WMA Millbrae ARC KB6TR 295 2 15 2,012 SCV EARS K80YHB (+N8MBW) 485 2 40 2,012 MO UBET ARC AB7YL 446 2 55 1,994 UT Greene County ARA KB9HIK 521 2 19 1,994 IN Bomb Squad AC6WO (+KE6VHM) 274 2 20 1,742 ORG Non-Club Group WB4DOJ 576 2 12 1,686 GA Panhandle ARC W5VH 334 2 15 1,076 WTX Rio Hando ARC W6GNS 352 2 18 936 LAX 7A Raleigh ARS W4DW (+KE4OQO) 3596 2 67 12,096 NC TRW.Xerox ARS W6TRW (+KF6FSE) 3190 2 70 11,372 LAX Greenet ARS K4HS (+KF4VDI) 2216 2 92 7,370 GA Sagamon Valley RC W9DUA (+K9KQH) 2009 2 32 7,188 IL Warminster ARC K3DN (+K3ZLY) 1929 2 40 6,858 EPA West Valley ARA W6PIY 1716 2 10 6,144 SCZ Quabbin Wireless Society W11N (+N1YPN) 1660 2 12 6,052 WMA ARC of El Cajon W4BGS 1503 2 45 5,964 SW Tulsa ARC W4OK 1066 2 300 4,402 OK North Hills RC K6IS (+K6PSZ) 950 2 25 3,874 SV Scarborough ARC VE3WE 971 2 20 3,792 ON Kings County RA W4AZZWP 922 2 30 3,444 NLI Keuka Lake ARA KV2W 799 2 22 3,162 WNY SARC W5SC 716 2 37 3,124 STX Central Mass ARA W1BIM 706 2 19 2,020 WMA Sierra Foothills ARC W6RFF 266 2 18 1,944 SV Yolo ARS NX6L 215 2 25 1,696 SV Mobile Sifers RC W3AWA 241 2 18 1,440 EPA 8A Battery Alameda County RC N6WG (+K6GLV) 1183 5 25 9,345 EB Durham Region QRP Club VE3QDR 844 5 16 8,885 ON 8A Four Lakes ARC W9JZ 2466 2 40 9,324 WI Kanawha ARC W8GK (+N8VUJ) 2333 2 66 8,508 WV Mahoning Valley ARA W8QLY (+K8BUNJ) 773 2 31 3,398 OH Mississauga ARC VE3MS 815 2 25 3,290 ON ARALB W6RO 407 2 43 2,114 LAX 9A Battery APA Digital Communications Network W6APA 371 5 30 4,215 SB 9A Woodbridge Wireless W4IY 5011 2 39 16,904 VA Rock River RC W9TCH (+K8OWD) 839 2 35 3,486 WI Radio Society of Tucson K7RST (+K6E6FQ) 689 2 25 3,252 AZ Crawford County ARC W8BAE 740 2 39 3,048 OH Hoosier Hills HC W9YQQ 495 2 20 2,604 IN Reno Area Simplex/UNR Radio Pack W7UNR 539 2 50 2,556 NV SARA W6ERE (+KF6FIR) 435 2 31 2,172 SJV Kings County RC W2RAK 346 2 30 2,156 NLI 10A 10-70 Repeater Assn N2SE 2427 2 44 8,666 NNJ Kalamazoo ARC W8VY (+K8BAAG) 1317 2 67 4,896 MI Turlock ARC W6BKN 989 2 15 3,404 SJV Guelph ARC VE3ZM 797 2 25 1,594 ON 11A Battery Norton ARC VE5NAR 1170 5 36 9,465 ON 11A El Dorado County ARC W6LSW 1122 2 37 4,692 SV Kern County ARC W6LIE 918 2 110 4,202 SJV ARE Comm KA9IMX 687 2 81 3,484 IL Triple A ARA AC3J 669 2 67 3,250 WPA BEARS N8DXR 379 2 16 2,030 MI 14A Battery Conejo Valley ARC AA6CV (+KE6GSCS) 1246 5 55 10,795 SB 17A Battery USECA K8MB (+K8BTAS) 1520 5 142 14,175 MI 21A Commercial Englewood ARA W2RJ (+W2UIJ) 168 2 10 2,806 NNJ 27A Nashua ARC N1NH (+N1ONC) 6768 2 87 22,080 NH 1B-1 Op Battery K3WWW 695 5 1 7,325 EPA N0UR 598 5 1 6,190 MN K7QD 474 5 1 4,940 ID W2SEX 405 5 1 4,850 WNY W3TS 407 5 1 4,470 EPA W1ECH 413 5 1 4,015 VT AA80Y 322 5 1 3,320 OH W6GL 320 5 1 2,920 SB K9NT 264 5 1 2,840 IL K4RDU 240 5 1 2,500 VA W9NJP 239 5 1 2,490 IL VA3TH 211 5 1 2,410 ON W1HUE 216 5 1 2,340 ID W5VBO 223 5 1 2,330 AZ AA7QU 220 5 1 2,130 OR W2LUX 181 5 1 2,110 SC
