## Results: September 1996 North American Sprint, CW

by Mark Obermann, AG9A Internet: cwsprint@contesting.com

N6TR 225 MARK IL AG9A DIT. Yes. there is a changing of the CW Sprint editorship. Tree has been doing this job for the past several years, somehow fitting it in between all of his other activities. I plan on doing my best at filling the rather large shoes of my predecessors, Tree, Trey, and Rusty. N6TR has done an outstanding job not only promoting this contest but in continually improving the way the logs are checked. Thanks Tree! The end result is an improvement in the way we all operate. You must copy (and send) accurately. There is no way to get around it. Trey and Rusty as previous editors have built the strong foundation of this contest for contesters. This is what draws us back for more every six months.

The September 1996 edition of the CW Sprint turned into one of the closest horse races for first place in the history of the contest. Tree, N6TR, and Dave, WX3N, at K4VX battled it out to a tied claimed score. When the log checking dust settled, Dave took the crown by just one QSO. This is Dave's first ever victory in the CW Sprint, though he has had many top ten finishes. K5GN, and N5RZ, produced nearly the same number of QSOs as the top two, but fell shy in the multiplier category. The Northeast generated excellent scores from K1KI, N2NT, and W2RQ who found 20 meters to be a good place to be this year, N6AA and N6TV represent the rest of the West coast in the top ten while KM9P returns to the top ten after a short absence.

On the low power side, NM5M generated a score that many high power operators would gladly trade for. KC6CNV grabbed second place with a nice effort from California. WA2SRQ moved up to third place this Sprint, up from fourth in the February event. The Low Power score box has been expanded to the top ten places. Low power has become a viable category over the past several years with increasing competition. In order to help me fully recognize low power entries in the future, please state your power category on the summary sheet submitted with each entry.

The results of the team competition closely mirror February's edition with the top three spots again nabbed by the SCCC #1, NCCC #1 and the Texas Association of Contest Ops. The NCCC #1 team closed the gap to a mere 9000 points. The Mad River Radio Club #1 team grabbed fourth place. The famed SMC "Dead Lizard" team went into hiding but hopes to be back again in February.

N5RZ, AA3B, K8JLF, and N1EE should all be congratulated for their golden logs. It still amazes me when guys like N5RZ and other high-scoring operators can submit an error-free log. This is something we should all strive for.

As for the future, logs will continue to be checked using N6TR-developed software. I find it time consuming enough to transfer my own log from paper to computer, so please save me this step and send your submissions electronically via e-mail or 3.5-inch floppy. Any format created by the popular logging programs is acceptable. E-mail your logs to cwsprint@contesting.com. Include the summary sheet and indicate your power level. An acknowledgment message will be sent to all e-mail submitters. Those sending disks can provide an SASE or stamped QSL for confirmation. As in the

past, feedback on log accuracy is available via e-mail (send your request to cwsprint@contesting.com) or SASE once the results have been published.

Let's keep the contest fun and challenging. Call your contester friends and talk them into giving Sprint a try. Organize your club to participate in the team competition and help bring new blood into this contest. It is important to the future of the Sprints.

The next CW Sprint is scheduled for February 9, 1997 at 0000-0400Z. This is Saturday evening local time.

See you in February!

## SOAPBOX

It's been a very long time since I worked North Dakota (my own state), VE4, or VE5 in a Sprint. VE4 is only 10 miles away, and VE5 is only 30 miles away. Maybe I can

## **A Different Sprint Experience**

The 1996 September CW Sprint was the first one I had been able to compete in in a couple of years. Like many of you, work and other interests have infringed upon my contesting time. Worse yet, my Sprint hosts of many years, K9EC and KA9UQT, left the Chicago area to take up residence in Georgia. While still welcome to operate from the Zeugs', the drive is no longer one hour! Mike and Lisa had a modest 80-ft one tower set-up near Chicago. It consisted of a pair of unphased KT-34s, a 40-meter rotatable dipole and an 80-meter sloper with an average height of 35 feet. Over the years, we had worked on the antennas to satisfy both Mike's DX aspirations and my Sprint requirements. Our final tweaks were to have been fixing the 40-meter signal (never good), but alas, we ran out of time. The 80-meter sloper was supposed to be a temporary antenna to get me through the '93 Sprints. It wasn't supposed to work being so low (65 ft at top, 10 ft at the bottom) and in the trees. After operating in that Sprint, the antenna was never again touched! It worked so well, we left it alone. Then it was all taken down.

Tired of missing the Sprints, I decided at the last minute to get on from home. Operating from home has always been a problem for me. RFI always gets into televisions, stereos, and telephones. My antenna is limited to a loaded dipole half rolled up on the roof and half hanging to the ground. This is why I always operate as a guest. I have grand designs for my eventual station in the country, but like most dreams, it will have to wait.

Competing in the Sprint with low power and a near non-antenna can be very frustrating, especially if you like the excitement of this contest. I fired up my TS-930, connected the coax to the rolled up loaded attenuator aerial at 15 ft and programmed the keyer. While I knew that making contacts would be an uphill battle and that contacts would be slow, I still managed to get upset enough to shut off the radio part way through the contest and walk away. Still, I got back on with 10 minutes to go and made some more contacts. My final total for submission was 127x35 = 4445 in about three hours. The number of multipliers fell only eleven short of the top scoring stations.

The positive result of this operating experience is that it gave me new insights as to why the good operators do so well and why others may never win. Yes, the winners are usually loud and yes, they QSO quickly. But the outstanding ops managed to answer my weak signal CQs and QRZs over and over. These guys are good!

Hopefully by February, I will have found a new Sprint "home." If not, you can bet I'll park my car down the street, close the curtains and hope the phone doesn't ring.—Mark, AG9A

teach my no-code XYL (NØHJM) a few of the dits and dahs, she could get the novice privileges and drive around in the mobile and work me in the 80-mtr novice band - WBØO.

First sprint that I have operated seriously

in 18 years! - KQ2M

Started on 40 and still didn't work very many of the teammates, and 20 suffered. Missed some easy mults - AZ, KS, LA, VT, WI, and all VEs but VE7 and VE2. Heard WØUY across the state line in KS but when I called him he said "up" (wasn't his freq) and with 2 minutes to go I missed him. As always, it was fun. - KMØL

My first sprint, a bit humbling, but I learned a lot. - NØDH

I took 2 hours 15 minutes off due to a rather impressive display of lightning. My electricity was off for about 2 minutes around 0130Z. Too bad, as 80 meters seemed to be playing real well - I think I could have made 220-230 Qs if not for the storm. - W9WI

I think I've finally got the rhythm of this thing. It's just so hard for us low power guys to compete. Love some of the inventive names, but it sure makes it difficult getting the exchange correct! - N2LSK

I got a late start due to work. Managed 1:45 of operation. Tried some new things with TR 4.05, worked much better but still had some trouble. What I need is practice, practice, practice. - WBØOLA

One radio, no antenna class. - K7LR

What an adventure...like jumping into the fast lane on the freeway with a pedal car. I could think of no better test than the CW Sprint to try out the remote system in a contest. - K7SS

Seems 20 always is long for CW Sprint, but not this time! My goal was to break 250, mission accomplished, no steroids even. -N5FG

I refuse to comment on the grounds of self-incineration (or was that incrimination?). Lesson learned: Don't use the actual contest to see how your new computer and radio get along! - AAØCY

Woke up at 5:00 am Saturday morning after getting 4 hours of sleep (XYL and I went out). Climbed towers all day Saturday. Pretty whipped by contest time. - KM9P

Decided to get in the CW Sprint at semi-last minute. Condx were good except for very tough 80 QRN. Beverages to NE and NW helped. Couldn't hear much on the TX antenna. Gotta get up to speed on two radio setup as did the antique paper/pencil and one radio deal. Congrats to K1Kl and K1DG for FB efforts from the NE. - N3BB

A fun start and an incredibly frustrating ending on 80. - K5ZD

Had to stop at 0315Z because of lightning. Might have broken 200 Qs if WX cooperated. Maybe next time. 40 was the "money" band here. Wish I could have stayed on 80 longer, might have even worked a multiplier or two! Thanks for the QSOs. - WR3O

I wish the Sprints were quarterly so my neural networks would be able to reinforce those little grooves I keep wearing in them. As it is, they are filled in by the gray-matter janitorial staff during the 6 months between Sprints. I'd tape record it, but it would be too depressing. - NØAX

Pesky RF in shack played havoc with computer until I discovered the loose ground

As you have already discovered, Mark, AG9A, is taking over the CW Sprint editor's job. I will be working with Mark to assure a smooth transition and will continue to support the software used to check both the CW and SSB Sprints.

In the results of the February contest, I neglected to mark most of the low power scores. This is one area maybe Mark can come up with a process improvement. My apologies to all that were missed. Here is a new Top Ten Low Power box for February:

## Revised February '96 Low Power Top Ten

NØAX	10406
WX9E	9020
WQ5L	8729
WA2SRQ	8404
KB8N	8160
AB4RX	7869
KZ8E	7257
WØHSC	7000
N8EA	6765
KE2PF	6570

Also, K8MR had a score listed as zero points. This is because the program didn't pick up his multiplier. I will have to add a test in the software to alert the log checking when a score with zero multipliers is present.

The Sprint contest has continued to be very popular since its humble beginning back in September 1977. It has developed into the ultimate contester's contest. Those who can participate without incurring brain damage should be proud of themselves, regardless of their score.

There are a few freaks who have mastered this contest. This comes from the proper mix of insanity, warped values, and hyperactivity. One exception is KRØY, who appears to be a normal person, except for 8 hours a year. Most people believe that Jeff is from a different planet. The rest of us use our previous efforts as a measuring stick to judge our efforts by.

Looking into the future, I hope the Sprint continues to be a stable tool for measuring one's operator ability. Records are meant to be broken, but they should be broken using the same equation that they were set by. Significant changes in the scoring or contest would make it difficult to measure improvement.

The Sprint must continue to set high standards for log checking. Due to the small number of logs (compared to the CQ WW), it is possible to provide feedback to all operators on their logging accuracy. For many, this is the only place where they can get accurate information. I challenge the editors of the future to constantly improve the processes used to check the logs.

I would like to acknowledge the previous editors: Rusty Epps, W6OAT, and Trey Garlough, WN4KKN (now N5KO). Rusty was the "father" of the CW Sprint and is still consulted from time to time when we need some insight into the "intent" of the contest. Trey was responsible for the introduction of automation into the log checking process and has been involved in most of the decisions that have been made. Having the previous editors involved has helped guarantee that the contest stays on course. Of course, K7GM as the SSB Editor is also a member of the team, along with the NCJ editor.

If you are interested in keeping the Sprint exciting, there is a very easy way for you to do that. Team competition is an excellent way to introduce new people to the contest and increase activity. All it takes is calling up some of your local friends and encouraging them to get on for the contest (challenge them to make 100 QSOs). Belonging to a team makes everyone feel important and part of the action. Just having one or two new teams each time will go a long way toward persevering this great contest.

Please give Mark the same support you have given me. This can be a thankless job—but it isn't. Be nice to him and send your log in electronic format whenever possible without having to make him ask for it. Send your Internet logs to cwsprint@contesting.com and they will be routed to Mark.

Don't miss the February Sprint. It will be a lot of fun trying to figure out who is who with all of the new call signs. As for me, I didn't get a new call sign, but I might be a rat and use a different one just to join the fun!

73, Tree N6TR

connection on CPU. - NA5Q

Got off to a pretty good start on 20, but all seemed downhill from there. Felt a bit weak on 40, but besides that don't know what happened. Used one radio and made 2 band changes. Congratulations to K1KI, N2NT, K5ZD, and W2RQ on big scores from out his way. After this effort I might even consider using computer logging the next time out in a Sprint. Thanks to John, N2NU, on the use of the station. - KZ2S

This was the first time I tried to seriously use two radios in the Sprint. It is MUCH harder than in any other contest. You can't wait around listening on the second radio to pick up the call like in other contests where you are S&Ping. One shot and boom. The learning curve definitely cost me QSOs. One time each I heard N6TR and KM9P on both radios and listened to them do it. They are amazing. 80 was real tough. Other than the West Coast, nobody was real loud here and not really workable until late in the last hour. - AB6FO

Congrats to anyone who worked me on 80! Antenna taped along ceiling of 2nd story apartment. Sure is easier to do domestic contests in the southwest. With this setup in IL, I'd be lucky to work anybody! - N4OGW

This was my first full effort in Sprint. Am looking forward to the next one! - AB5LX

Before this contest starts, I always set my computer clock by WWV and I don't send a dit until the clock turns over to 0000:00. I wish everyone would do the same. It's very annoying to tune the band and hear so many stations beginning up to 45 seconds before the contest starts. - K8HVT

I need to get a new transceiver. The intermodulation distortion in this contest was as bad as it gets during the last couple of hours of SS! I really enjoy the intensity of this contest. Congrats to all who entered. - W7ZRC

This was my second CW sprint but my first "real" effort. -KB3AFT at K3CR.

Just wait until that 'lil 20' redwood in the garden grows. Still operator limited but better than my best previous with the delta loops and low power, and not too bad for wires at 25 ft even if I did use the amp. - AEØM

Am afraid to say anything... it will get printed as lead comment. - K3MD

First time ever in high power. Missed the first 65 minutes due to grandkids' visit. Still had a great time. - N4ZR

Line noise was really bad on 20 meters. made all my 20-meter QSOs listening on an 80-meter EWE. Apologies to that CT1 who called me that I just could not pull through. - N6TV

Loudest guys: K4VX and N6TV who I heard 95 times on 40. - N2NT

I see that everyone is reporting missing NC in CW Sprint. Not surprising! K4PQL and I (at AA4NC) were planning on operating, but Fran came to visit. Howie lost his tower. An oak fell across one set of guys and down it came. Will's towers stood, but the mast holding the 204BA and 402CD bent. The antennas are fine except they're pointing at the ground. - KI4HN

First Sprint from the new QTH. 100 watts and 40 & 80-meter dipoles. No I didn't go to W9DXCC and everyone should know who "Fubar" is by now. The two radio crowd is easily identified by excessive CQs with apparent disjointed interest (i.e. not respond-

Top 10 Scores		Top 10	QSOs	Top 10 M	lults	Top Ten L	Golden Logs		
K4VX N6TR	15272 15226	K4VX N6TR	332 331	N6AA W1WEF	47 46	NM5M KC6CNV	12144 9460	(No QS Remov	
K5GN N5RZ N2NT K1KI N6AA N6TV KM9P W2RQ	14850 14432 13860 13815 13677 13616 13502 13464	K5GN N5RZ KM9P N2NT K1KI W2RQ K6NA K5ZD	330 328 314 308 307 306 301 300	K5GA N6TV N6TR K4VX Many	46 46 46 46 45	WA2SRQ NOAX KK9W N9JF K8JLF AD4VH KG5U N8EA	9204 9159 8346 8307 8160 8034 7920 7880	Call N5RZ AA3B K8JLF	QSOs 328 263 204

Team co	ompetition							
Southern California Contest Club #1		Northern Contest C	California Ilub #1	Texas A of Conte	ssociation est Ops	Mad River Radio Club #1		
N6TR N6AA K6NA N6ZZ N6VR N6TJ AB6FO KC6CNV KJ6HO	15226 13677 12943 11610 10956 10794 10710 9460 9030	N6TV N6XI W6RGG N6RO WA6AUE NV6O K2MM W6EMS N1EE N6PN	13616 11520 9900 9881 9828 9152 9061 8463 7880 6194	N5RZ KM9P K5GA NM5M AD5Q NA5Q WB5B N5DU KR2J	14432 13502 13386 12144 10619 9922 9082 7439 3193	K4VX(WX3N) K8CC K8MR KW8N W9RE KMØL K8HVT KU8E AABU K8MJZ	15272 12496 11704 10965 9945 9553 9280 8820 2822 1550	
6, FRC (N	I2NT.W2RQ.A	AA3B,KZ2S)				Z)5	50253	

9. WMW #2 (WA2SRQ,K8JLF,KN4QV,NØDH,AA9JY,WA7UVJ,K7CW,AAØCY,WAØRJY) ...... 39656

ing to lots of LOUD guys calling them until the "other" QSO on the "run" radio is complete). Heard XE1/AA6RX calling many who didn't pick the ripe multiplier out of QRM. Highlight was working HH2AW on three bands. - K9VV

Some of the local TCGers said a thunderstorm shut them down for a while. With the headphones on, AF up high, window shades down and curtains closed I missed all the action. (So, that was the source of all those static crashes! DUHH.) Thank God I didn't get zapped. Although I still didn't break 200 Qs this was my best CW Sprint yet. Always nice to have Jose/CT1BOH in the CW Sprint. Go TCG! - WA6KUI

This was my first full 4 hour Sprint since leaving Ohio in 1989. The contest seemed to run opposite to my expectations. I figured 20 meters would be a bust given my poor antenna. Turns out that 20 was my best band. Unfortunately, I had the opposite problem on 80 meters — the rate meter just kept dropping. Guess it's my W8 conditioning, which says that 20 will be a chore, but you'll make up for it on 80 meters in the last hour. Florida seems to be the exact opposite of Ohio. Between the lousy propagation, the intermod on my Paragon, and the fact that I was running barefoot, 80 meters was like a bad root canal. - AD4VH

First time with new radio (FT1000MP) and using TR Log. Was all thumbs. Tried two radios, that was a mistake until I have practiced a lot more. Will use TR Log for all future CW tests. - N6RO

My first contest from my "new" shack. I ran the winter NAQP from my unfinished basement, but now I have an actual room. Now all I need is a real antenna and real radios. (And perhaps a real operator....) - AA4LR

Eighty mtrs very noisy with thunderstorms nearby. Used the EU Beverage the whole time. - WX3N

Well, I was all ready to hit the airwaves with my trusty dipole (now with one end at 40 feet and the other at 2 feet thanks to the first hurricane of the season). Heard the hurricane was coming so did all the preparation things including lowering the antenna till it was resting on the roof with more slack than some of my students. The long and the short of it was that Fran snapped the 12 ga stranded wire like it was nothing. - K7GM

Forty was the worst of the three bands for me. Missing mults really hurt; I chased VE5SF for a while but never made it. Also missed the guys who were QRT from WX. Thanks for all the Qs. And add my vote for doing this one once a quarter.- W6EMS

Missed Alabama although I heard N4YOS with 3 minutes to go. Couldn't find him before the end. We lost power 2 hours before the contest during a thunderstorm and it didn't come back on until 0000Z. Had to quickly restart everything but fortunately, I had set up the basic info in NA the night before so it was just a matter of waiting until the 286 booted. Made first Q on 40 at 0005Z so didn't loose too much time. - KC4ZV

		OTU		40	80	aso	Mul	Score	Team	Call	Name	атн	20	40	80	QSO	Mul	Score	Team
Call	Name	QTH	20						ream				85	88	47	220	43	9460	SCCC #1
K1KI	Tom	CT	127	109	71	307 300	45 44	13815 13200		KC6CNV NV6O	* Dan Bo	CA CA	65	97	46	208	44		NCCC #1
K5ZD	Randy Jack	MA CT	105 93	114 106	81 78	277	46	12742		K2MM	Zap	CA	77	79	65	221	41		NCCC #1
W1WEF KQ2M	Bob	CT	72	91	66	229	42	9618		KJ6HO	Bruce	CA	98	62	55	215	42	9030	SCCC #1
K1DG	Doug	NH	83	75	77	235	40	9400		W6EMS	Steve	CA	93	86	38	217	39		NCCC #1
K8HVT	Hal	CT	81	87	64	232	40	9280	MRRC #1	NC6U	Kevin	CA	81	78	41	200	40		SCCC #2
K8JLF	* Dave	MA	79	103	22	204	40		WMW #2	N1EE	Scott	CA	76	93	28	197	40		NCCC #1
K1LL	* Art	NH	58	57	53	168	34		MRRC #2	N6IP	Bob	CA	57	81	52	190	38		NCCC #2
WR1P	Nate	MA	33	37	27	97	27	2619		N6CW	* Terry	CA	101	41	38	180	40 38	6764	SCCC #2
W1FJ_	Αl	MA	0	40	33	73	27	1971		AD6E	Al Na-44	CA	60	78 76	40 38	178 163	38		NCCC #1
KB1BZC	Stu	NH	48	6	0	54	19	1026		N6PN	Matt	CA CA	49 62	82	0	144	37		NCCC #2
	A		101	444	06	200	45	13860	EDC	AEØM WW6D	Tony * Doug	CA	49	57	23	129	37	4773	11000 #2
N2NT	Andy	NJ	101 92	111 112	96 102	308 306	45 44	13464		WK6V	Bill	CA	46	59	22	127	36		SCCC #2
W2RQ KZ2S	Bill	NJ NJ	103	95	79	277	41	11357		W6HAL	Lee	CA	41	30	3	74	31		SCCC #2
WA2SRQ	John * Ed	NJ	71	94	71	236	39		WMW #2	AC6NS	Daren	CA	24	5	13	42	23	966	NCCC #2
N2LSK	* Geo	NY	57	38	17	112	29	3248											
NJ2L	Rus	NY	26	0	0	26	11	286		N6TR	Tree	OR	126	112	93	331	46		SCCC #1
NE2W	Ed	NY	0	0	7	7	6	42		K7SS	Dan	WA	52	109	62	223	43	9589	
										NØAX	• Ed	WA	67	99	47	213	43		WMW #1
AA3B	Bud	PA	98	89	76	263	44	11572	FRC	AA7BG	Matt	MT	67	103	45	215	40		MRRC#2
K3MD	John	PA	56	66	67	189	43	8127		W7ZRC	* Rod	ID	62	84	46	192	36		WMW #1
ААЗНМ	Craig	MD	52	49	55	156	39	6084		KI7Y	Jim • Obi	OR	40	96	21	157	39 38	6123	WMW #1
N8NA	Karl	DE	47	75	35	157	34	5338		K7LR	* Chip	WA	60 33	59 67	37 31	156 131	35		WMW #2
K3CR	* Jim	PA	42	28	45	115	31	3565		NØDH K7NPN	* Dave * Mike	WA WA	44	38	33	115	33		WMW #1
KNOD	Dill	CA	00	127	89	314	43	13502	TACO	WA7UVJ	* Dink	WA	26	49	19	94	32		WMW #2
KM9P	Bill Don	GA TN	98 80	106	82	268	44	11792		K7CW	* Paul	WA	30	58	11	99	30		WMW #2
N4ZZ N4BP	Bob	FL	99	88	36	223	45	10035		KK7A	* Jim	ID	20	46	31	97	26	2522	
KC4ZV	Greg	AL	46	101	76	223	42		TCG	AAØCY	Bob	NV	21	37	4	62	31		WMW #2
AD4VH	* Mike	FL	87	87	32	206	39		FCG	WAORJY	* Jack	WA	37	16	4	57	21	1197	WMW #2
KB4GID	Frog	GA	49	87	72	208	37	7696		KQ7I	Jeff	OR	21	25	0	46	20	920	
AA4GA	* Lee	GA	56	89	35	180	41	7380	WMW #1	N6MZ	* Mike	WA	41	0	0	41	17	697	WMW #1
KY2P	* Scott	TN	25	89	72	186	38	7068											
WA6KUI	* Ric	TN	23	87	56	166	37		TCG	K8CC	Dave	MI	72	113	99	284	44		MRRC #1
WR3O	Kirk	TN	43	78	29	150	38		TCG	K8MR	Jim	OH	73	111	82	266	44		MRRC #1
KN4QV	* Jim	GA	47	74 50	33	154	35	4768	WMW #2	KW8N	Bob	OH	77 47	92 94	86 69	255 210	43 42		MRRC #1 MRRC #1
WD4AHZ	* Ron	FL TN	66 37	52 26	31 46	149 109	32 37		TCG	KU8E N8EA	Jeff * Joe	OH MI	62	70	65	197	40		MRRC #2
W9WI KA8OKH	* Doug * Rich	KY	0	56	0	56	28	1568	iou	AA8AV	* Ken	Mi	37	91	59	187	41		MRRC #2
N4DW	* Dave	TN	ő	14	18	32	18	576		K8JM	John	MI	65	69	50	184	41	7544	
AA4LR	* Bill	GA	3	4	2	9	9	81		N4ZR	Pete	W۷	41	80	61	182	38	6916	
704,1211	Δ	<b>.</b>	_			-				AABU	Ugly	MI	26	27	30	83	34	2822	MRRC #1
K5GN	Dave	TX	140	118	72	330	45	14850		K8KFJ	Gary	WV	0	58	11	69	32	2208	
N5RZ	Ralph	TX	135	121	72	328	44		TACO	K8MJZ	* Eď	MI	22	40	0	62	25	1550	MRRC #1
K5GA	Bill	TX	116	105	70	291	46		TACO										
KN5H	Steve	NM	103	106	61	270	45	12150		K9ZO	Ralph	ΙL	83	83	80	246	42	10332	
NM5M	* Eric	TX	108	102	66	276	44		TACO	W9RE	Mike	IN	62	98	95	255	39		MRRC #1
N6ZZ	Phil	TX	101	142	15	258	45		SCCC #1	K9BGL	Karl	IL.	78 66	85 06	46	209	45	9405	\A/R/I\A/ #4
N5FG	Ray	MS	94	105 94	70 55	269	41	11029		N9JF	* Jim	IL Wi	65 77	96 66	52	213 181	39 40		WMW #1 MRRC #2
N3BB WA6OTU	Jim Mark	TX OK	112 101	94 111	53	261 265	42	10962	SCCC #2	WB9HRO K9VV	Jim Fubar	IN	77 20	77	38 66	163	37	6031	WITHO #2
AD5Q	Roy	TX	102	106	51	259	41		TACO	AG9A	* Mark	JL.	32	63	31	126	35	4410	
NA5Q	Larry	TX	81	102	59	242	41		TACO	AA9JY	* Oddbal		18	40	34	92	35		WMW #2
WB5B	Bob	ΤX	85	95	59	239	38		TACO	WBØOLA	* Jim	IN	0	31	35	66	30	1980	
KG5U	* Dale	TX	75	82	41	198	40	7920											
N5DU	Bob	TX	76	66	31	173	43		TACO	K4VX (WX3N		MO	104	133	95	332	46		MRRC #1
KZ8E	* Earl	TX	76	62	19	157	38	5966	OFF	WB0O	Bill	ND	98	98	73	269	44	11836	
N4OGW	* Tor	NM	45	68	17	130	34	4420		KMØL	Steve	MO	57	109	67	233	41		MRRC #1
KR2J	Bob	TX	33	33	37	103	31		TACO	KØAD	AI	MN	77	88	64	229	40	9160	1421 0157 07
W5NR	Art	TX	35	22	2	59	26	1534		KK9W	* Dave	IA NANI	51	78	85	214	39		WMW #1
NEAA	Dick	C A	122	116	EO	204	47	13677	SCCC #1	K9WIE	Jim * Lorna	MN	63	80	48	191	40	7640	
N6AA N6TV	Dick Bob	CA CA	122 108	116 120	53 68	291 296	47 46		NCCC #1	AAØBY KBØIHM	* Larry * Pat	MN MN	76 50	73 72	54 63	203 185	37 39	7511 7215	
N6IG	Jim	CA	103	124	63	290	45		SCCC #2	WAØI	* Randy	MO	45	59	36	140	34	4760	
K6NA	Glen	CA	99	122	80	301	43		SCCC #1	WOUY	* Tom	KS	41	70	25	136	32		WMW #1
N6XI	Rick	CA	98	101	57	256	45		NCCC #1	NØAT	Ron	MN	1	0	0	1	1	1	
N6VR	Ray	CA	92	102	55	249	44		SCCC #1	•					_				
N6TJ	Jim	CA	91	112	54	257	42		SCCC #1	HH2AW (9A	(ASA) Ivo	нн	48	61	30	139	33	4587	
AB6FO	Ken	CA	78	99	61	238	45		SCCC #1										
W6RGG	Bob	CA	82	94	49	225	44		NCCC #1	* indicates I	ow power	operat	ion (16	0 watt	s or le	ess).			
N6RO	Ken	CA	84	94	63	241	41		NCCC #1										_
WA6AUE	Jim	CA	79	107	48	234	42	9028	NCCC #1										