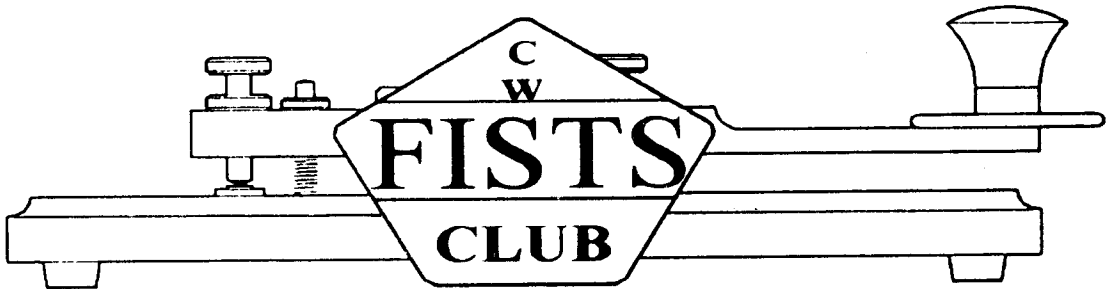


# The Keynote

Newsletter of FISTS CW Club, the active chapter of the  
International Morse Preservation Society

"Accuracy Transcends Speed"



- Further the use of CW
- Encourage newcomers to use CW
- Engender friendships among members

"When You've Worked A FISTS, You've Worked A Friend"

## HOW DO I...?

**...JOIN?** Membership is open to everyone interested in Morse code, irrespective of their speed and ability. Subscriptions are \$15.00/year. Under 18 is \$10/year. Family members may join FISTS at no extra charge. Only one newsletter will be mailed per household. to FISTS, P. O. Box 47, Hadley, MI 48440-0047.

**...RENEW?** Send \$15/year (\$10/year for under 18) to FISTS, PO Box 47, Hadley MI 48440-0047. Your renewal date is on your mailing label -- please look at it!! *Renewal notices are not mailed out individually.*

**...SEND APP OR SAMPLE NEWSLETTER TO A FRIEND?** For a FISTS brochure, send an email to Joe Pardue, at <w5os@arrl.net> with their name, call sign, and postal address. For a sample Keynote, please send \$1 to defray postage. SASEs are appreciated. Joe's postal address is Joe Pardue, 29 Melrose Dr., Marrero LA 70072-5055. Applications are also on the FISTS Webpage.

**... ORDER CLUB SUPPLIES?** Irene Kott, WO8E, 44609 N. Bunker Hill Dr, Clinton Twp, MI 48038 has gold logo stickers 200 for \$5; "I Support KNOW Code" buttons for .50; Blue enamel /gold metal clasp-back logo pins \$2.50; Cloth patches 3" octagon shaped \$1.50; FISTS coffee mugs \$7.50; **FISTS Club T-Shirts M and L only**, \$9.00. Rubber stamps with FISTS logo for use with an ink pad (not included) for \$5.00

\*\*\*\*\*Pse make checks out to FISTS, these prices DO include Priority postage.\*\*\*\*\*

**... GET AN UP-TO-DATE MEMBERLIST?** Send a SASE with \$2.00 (US) to cover printing/ mailing costs to Ed Hayes, N7CFA 2628 Lilac Street, Longview WA 98632. Lists are also available on the FISTS Web page.

**...Join the FISTS On-Line Email List?** For periodic Email updates on FISTS activities and information, send your Email address, callsign and FISTS number to Brian W8BL at his Email address: blafont@tir.com

**...GET/SEND FISTS QSL CARDS Via BURO?** Stan Reas, K4UK, runs the Buro. Send SASEs and FISTS member cards only (DX and NA) to him at 1020 Long Island Dr, Moneta VA, 24121.

**...SPONSOR A DX FISTS?** DX FISTS have a separate block of numbers; their Keynote is mailed from the UK. Send their info to Geo Longden, G3ZQS, at 119 Cemetery Rd, Darwin Lancs, BB32LZ; he'll send them a DX application.

**...APPLY FOR THE CENTURY AWARD?** Send a list of contacts (call, FISTS#, qth, date, band and power) used to Dennis Franklin, K6DF, at 4658 Capitan Drive, Fremont, CA 94536-5448. Don't submit QSLs. There is no charge to FISTS members for the regular Century Award. If you are applying for the UK issued awards, send your request to HQ in England (Bob Lowe, 12 Cavenham Grove, Darwin England BL14UA including \$5 US cash (no checks or money orders).

**... VOLUNTEER FOR or GET A CODEBUDDY?** Write to Margaret L. Putman, 502 Marguerite St., Elgin, IL 60123. We need ELMERS, please volunteer to be a Code Buddy!!

**...GET MY PHOTO ON THE PHOTOPAGES?** Send a snapshot of yourself to Ken Kott, W8ROG 44609 N. Bunker Hill Dr., Clinton Twp, MI 48038.

**...GET A COPY OF FISTS PRESENTATION** to give at a local club meeting? It's easy and fun! We send you everything you need. Contact Joe, KK5NA, 3618 Montridge Ct, Arlington TX 76016. email: kk5na@quadj.com

**...FIND THE WEB PAGE?** <http://www.FISTS.org>

**...SUGGEST IDEAS FOR THE WEB PAGE?** Contact Bill KK4KF at <KK4KF@LizardCop.com

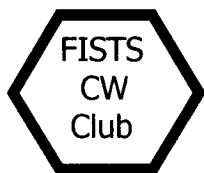
**...ORDER FISTS CLUB QSL CARDS?** For pricing info send SASE to WX9X at 1608 E. Lincolnway, Suite H - Valparaiso, IN 46383. A scan of the QSL card is on our FISTS Web page.

**...ORDER A FISTS CLUB ID BADGE?** Our club badge is dark blue, with FISTS logo in gold and your name, FISTS number, callsign, and Int'l Morse Preservation Society in white. They are \$8.20 postpaid from The Signman of Baton Rouge, 879 Castle Kirk Dr., Baton Rouge, LA 70808.

A non-engraved, laminated club badge is available from Bruce Eichmann, W2BE, 204 E. Lake Blvd., Medford, NJ 08055. Cost is \$4.75, NJ residents \$5.00 because of tax.

**...IMPROVE MY CODE SPEED and MEET LOTS OF NEWFRIENDS?** Join FISTS! Get involved in the nets and activities! Volunteer to be a Code Buddy! Write an article for the Keynote about your interests!

The Keynote, official publication of FISTS CW Club, is published approximately 10 times a year by Nancy Kott WZ8C, PO Box 47 Hadley MI 48440. WZ8C reserves the right to edit submissions for clarity, suitability and space limitations.. Comments not attributed to another are written by WZ8C. **Articles from the Keynote may be reprinted if credit is given to the original author.**



# The Key Note

The North American Memo Version by Nancy Kott WZ8C  
USA and DX member news and activities

---

International

Morse Preservation  
Society - Issue 2, 01

Slow Traffic Net:  
Tuesday and Thurs-  
day 9PM EST on  
3.682

Slow RagChewing  
Group: Wednesday at  
9PM EST on 3.720

Volunteer Net Con-  
trols needed to run  
the Century Net on  
Sunday afternoon  
on 14.058 MHz

Saturday QSO Groups:  
2000Z on 14.058 MHz  
and 7.058 MHz at  
2300Z.

Sunday Slow Speed  
Chat: 21.158 MHz at  
1700Z

30 Meter calling fre-  
quency: 10.118

Please keep watch on  
the Novice subbands  
and frequencies ending  
in .x58 -- but PLEASE  
spread out. There have  
been over 7000 FISTS  
numbers issued now, if  
we all try and chat on  
these frequencies all  
anyone will get is a lot  
of QRM. Please be  
courteous of nets and  
QSOs in progress.

Courtesy At All Times!

If you move please  
send your address  
change to WZ8C. It  
costs FISTS 60 cents  
for each undelivered  
Keynote due to  
address changes. This  
really adds up!

Issue 3 2001 FISTS CW Club

Happy Spring, FISTS! Spring  
means April showers and May flow-  
ers, but it also means the Spring  
Sprint and the Dayton Hamvention.

There is a "changing of the guard"  
of the Sprint Manager volunteer. Al,  
W8FAX, who has been generously  
donating his time and effort as our  
Sprint Manager has accepted a new  
position at his "real job", which  
means training and traveling. He  
won't have time to take care of the  
Sprint work anymore.

Dan, N8IE, has graciously agreed to  
be his successor. Al transferred the  
supplies and logs from the Winter  
Sprint to him, so Dan is set up to  
handle the upcoming Sprint, as well  
as do the totals from the Winter  
Sprint. Please make note of Dan's  
address, which is on the Sprint en-  
try form in this issue, and send your  
logs / soapbox comments to him.

Many thanks to Al for his work with  
the Sprints and good luck to him  
with his new job responsibilities!

FISTS will have our usual  
Hamvention booth #100, located on  
the ramp between the main arena  
and the cafeteria. Please stop by and  
say hello and sign the sign-in sheet.  
You can renew your subs, and we  
also have mugs, pins and stickers  
available. It's cheaper to buy them  
at Dayton because you don't have  
to pay the postage. If you can spare  
a couple hours to help work the  
booth so WO8E and I can take a  
breather, it would be appreciated!

As we go to print now, I do  
not know what the plans are  
going to be for Friday night  
when we traditionally have  
the FISTS get-together. The  
situation at the Crowne Plaza  
was so abysmal last year that  
I refuse to patronize them any-  
more. No one has sent me any  
other suggestions, so I may  
ask the QRPers if they mind  
if we join them during their  
Friday Vendor Night. What-  
ever happens, details will be  
available at the FISTS booth.

Mail delivery for Issue 2 was  
incredibly slow. It took over  
four weeks to be delivered in  
most places, and some FISTS  
are still waiting! I brought this  
up to the Postmaster, but she  
didn't have any ideas on why  
it may have been slower than  
usual. There is nothing I can  
do to speed it up. This is  
scheduled to be mailed the  
first weekend of April. I hope  
you get it before the Sprint.

There is always a lot of con-  
fusion about the use of UTC  
or Z time. I wrote up a short  
piece on time conversion, and  
included a couple charts.  
Hope it helps those who have  
trouble figuring this out.

Thank you to Harvey, N6JUG  
for his artwork on the  
SawBug. If you build one,  
send in your comments!  
Nancy WZ8C  
Page 1

# Welcome to the New FISTS

#	Name	Call	State	Sponsor	#	Name	Call	State	Sponsor
8037	Hunter	?	MA		8082	Fred	KI6YN	CA	Webpage
8038	Fabien	VA2FMG	QUE	Webpage	8083	Gus	AG4CK	TN	
8039	John	WB0DTE	KS	KD7JG	8084	Tom	WB5QLR	TX	Webpage
8040	Don	KC6D	CA	Webpage	8085	John	WA0STX	MO	Webpage
8041	John	KW4JS	TN	Webpage	8086	Mike	KB9MRD	IL	
8042	Bob	W2ZXQ	NY	Webpage	8087	Dick	N1OT	CT	
8043	Norman	VE3CJE	ONT	Webpage	8088	Pete	VE7SPL	BC	Webpage
8044	David	KC7RNU	WA	K7ZPE	8089	Paul	VO2PRS	NF	W5OS
8045	Jim	AD4J	GA	Webpage	8090	Mark	KG4JJQ	SC	Webpage
8046	John	KG6CSN	CA	Webpage	8091	Joe	KC2GVQ	NY	Webpage
8047	Ronald	N8KZH	WV	WB2FXK	8092	Tex	WA0KZL	IA	Webpage
8048	Cal	N9KO	IL	Webpage	8093	Jeff	K8UFO	WV	K8UF
8049	Jim	W2ZP	NY	WB0PYF	8094	James	WI4A	VA	
8050	NaturistARC	NU5DE	TX	N5KF	8095	Toung-Van	KF4NDS	VA	
8051	Lou	K5IAW	TX	Webpage	8096	Chas	K8IJ	FL	Webpage
8052	Dan	W6SBE	CA	Webpage	8097	Marv	N8HZM	MI	Webpage
8053	Vincent	N1VS	CT	WB2FXK	8098	John	KC0IEM	IA	Webpage
8054	Robin	KA8VOW	OH	Webpage	8099	Barry	VE4AFT	MB	WB2FXK
8055	Dale	K5BQ	TX	KC5AFL	8100	9-0-4ARC	K9IM	IL	N9LEC
8056	Robert	K6VGA	CA	VE6VIA	8101	Bruce	KA8TNK	MI	Webpage
8057	Tom	KC8JW	OH		8102	James	N2OSL	NY	WB2FXK
8058	Bob	KI8JM	OH	N7XN	8103	Ed	N3EK	FL	Webpage
8059	Percy	KW6AR	CA	W5NVK	8104	Jim	KG4LDY	VA	Webpage
8060	Rick	W0IS	MN	N9BOR	8105	George	WB8BRC	MI	Webpage
8061	Ralph	N4ACF	NC	W4DON	8106	Phil	WA6SEU	CA	N6AVC
8062	Tom	N3QLA	MD	Webpage	8107	George	AC7AI	WA	K7ZPE
8063	Alan	AC2K	WA	W5OS	8108	John	AE4PX	NC	N4PAC
8064	Irv	W8JUR	MI	W7OYG	8109	Mike	N4VBV	AZ	KC7TNT
8065	Rick	KB2TRZ	NY	Webpage	8110	Tom	KB3CVO	PA	KC7TNT
8066	Jerry	W8AJC	WV	Webpage	8111	Jorge	XE2EA	Mex	
8067	Bill	W5OXM	NM	Webpage	8112	Ansel	KC2HUC	NY	KC2FVO
8068	Michael	WV7T	CO		8113	Brian	K7RE	AZ	W9UQB
8069	John	KC9FC	IN	N9TA	8114	Bill	KF4RWF	NC	W4GEO
8070	Vincent	VA3EWP	ONT	Webpage	8115	John	KF6SDV	CA	Webpage
8071	Rob	KD7KAR	AZ	K7ZPE	8116	Don	K4UE	AL	Webpage
8072	Dick	K3CDQ	MD	WA1GAG	8117	Bob	N3OO	PA	Webpage
8073	Larry	W0WLL	IA	Webpage	8118	Mary	N3YL	PA	Webpage
8074	Charlie	N1AOK	NH	Webpage	8119	Peter	VE1BHH	NS	K4PTU
8075	BayPinesARC	W4BPH	FL	KU4BT	8120	Jerry	K8AON	WV	K3QA
8076	Donald	WA2ELD	KY	WB2FXK	8121	Jack	KD7GKB	OR	K7ZPE
8077	Cecil	K5YQF	TX	W6DDB	8122	Michael	KA2RGF	NY	WB2FXK
8078	Ron	W5CFN	OK		8123	Dick	N5VTV	TX	Webpage
8079	Stan	VE7SKJ	BC	VE7NI	8124	Conrad	K1EC	CT	Webpage
8080	Doug	VY1BD	Yukon	VE7DXF	8125	Jim	AB4CZ	GA	AD4J
8081	Nick	KG6FFY	CA	Webpage	8126	John	N2NZ	NJ	NU3E
					8127	Diehl	W4TI	AL	Webpage
					8128	Bill	K4MLJ	TN	KC0GGN

#	Name	Call	State	Sponsor
8129	GERRY	VE2ZE	QC	VE2ENB
8130	CHUCK	KG6FOD	CA	Webpage
8131	BILL	KD7JXY	WA	K7ZPE
8132	RON	VE3FMW	ONT	KA2KDJ
8133	BRAD	AA5CH	AR	Webpage
8134	MARK	KA9MDJ	IL	Webpage
8135	HOWARD	VE6FS	AB	VE6VIA
8136	GEORGE	N8LE	WV	K8NY
8137	VIRGIL	K5OOR	TX	N7GSU
8150	Rutgers ARC	WA2NPP	NJ	KC2GZV

### Changes

R. L., KT7Q, 7684, wants to be known as Renee

Frank, N3ZOC should have been listed as the sponsor for Dave KC2GZV #8031

4545 - Neil: W7MAF to NB7Q  
 6805 - Bob: WD9HZV to W9HZV  
 4561 - Carl: WA7QJY. to WA7CS  
 2950 - John: VE6ZAA to VE6QSL  
 7407 - Buz: K8BUZ to K8QY  
 7447- Gary: K5TFT to WY5P  
 3114 - John: WB2UEC to N2UC  
 7361 - Jim: W6PXM to KA6J

### Special Event

Several FISTS members will be participating in activating this Special Event.

Old Dominion Chapter #202 - QCWA and other area Clubs will operate the Special Call Event Sign WW2DDM commemorating the dedication of the National D-Day Memorial in Bedford, VA. 1700-2400Z June 6 to June 10.

7.050, 7.250, 14.050, 14.230, 21.050, 21.230, 28.050, 28.350, 50.222, 144.222.

Send SASE for QSL or Certificate to Charlie Beckwith, K4BSF, 563 Buzzard Rock Lane, Rocky Mount, VA 24151-4844. For additional information see: [www.usit.net/~pob/qcwa](http://www.usit.net/~pob/qcwa)

The "vanity" call WW2DDM was selected for this activity as:

(W)orld (W)ar 2 (D)-(D)ay (M)emorial

## FISTS 80 Meter Net Alive and Well -- Join In!

I am Harry KI5UK QNN for MSN Slow net for over 5 yrs, net manager also. and QNN on Thursday's Sunrise net 7148 7:00 am 1300 CST

I will take over the FISTS 80 meter net Tuesdays and Thursdays as I can't let go of CW, not yet. Also I will take net from Chuck Wednesdays at 9:00 pm. Just wish it was a little earlier. Thirty minutes would be great. But TEX. net meets on 3720 at 8:00. I'd get in their way, so 9 is fine. The NET would change a little. Last night I was QNN for Fists 3682 had 5 QNI's w/ME of course

I will take over the slow nets from Roger KI8DU and Chuck on Wednesdays A fello can QNI on my QRU he can give short wx rept /temp/ rst w/ short comment or move somebody off for QSO. Most of these people are getting old like me, don't let that freq. go I'll give it my best shot. Weather permitting, when I can't call net KI8DU can call it. I'll sure give it my best.

*Thanks, Harry, Roger, Chuck and everyone else who's pitching in to help keep this net alive! Nancy-WZ8C*

### Military Gear Slow Speed Net

If you enjoy or operate old military radios and would like a place to communicate with other with the same interest, consider joining the Old Military Radio Net (OMRN). They meet at 9PM EST on Sunday nights on 3.570 and run slow speed CW. Everyone is welcome, but be sure to send slowly. as this is a QRS net.

### Historic Marconi Site Activated

Jim, VE1ALZ, writes, "I will be operating out at Marconi Site from June 1 to Sept 15 from 10 am to 6 pm (*local time, I assume?* -WZ8C) seven days a week for the summer. The call for Marconi Site is VE1VAS. CW only, on 14.002. I hope to work many FISTS members from VE1VAS. Marconi Radio Table Head, Glace Bay, Nova Scotia, Canada is where Marconi made his first QSO in 1902. I am proud to be a part of this great place for CW operators. I can also be found on 30 meters around 10.119 when the band is open."

## Helpful Hint

From Jim K9JXW, #2325 -- I have had so many people comment that I must be using a computer to check previous FISTS QSO's that I thought I'd pass along my "low-tech" technique.

I simply use the Directory Issue of the Keynote, a Highlighter Marker of different colors for different years, and a pen. After filling a page in my logbook, I go to the Directory, highlight the person's call, etc. (or at the top or bottom of the column if not listed), and note the date of QSO. This way I can quickly check when I hear someone or am called. If previously worked, I quickly check the date noted in the Directory and then check the logbook to see if a CC# has been obtained. I am closing in on my Diamond, and this system has worked quite well so far.

## Diamond Hints

*Larry, W8JCR, just earned his Diamond and sent along these statistics, which I thought would be of interest. See, it IS possible to get 1000 FISTS points with a straight key and homebrew antennas - hang in there and keep listening!*

USA stations	683 qso's	683 points
Canadian stations	32 qso's	64 points
Foreign stations	107 qso's	214 points
Club stations	15 qso's	45 points

Larry writes: The points were earned in 17 months with a straight key, a homebrew folded dipole antenna covering 10-40 meters, and 100 watts. My only suggestion is to listen-listen-listen (I never call CQ ). Note the folded dipole antenna-I have only heard three other stations using the folded dipole—it does work!

Finally, my goal was to make contact with two new FISTS members each day—this worked very well.

Larry Holden—W8JCR

## Bug Adjustment Hints

Don Devendorf W8EGI

1. Adjust the armature pivot bearing for just barely perceptible lay and tighten the locknut.
2. Align the contacts and clean them with bond paper. (No abrasives)
3. Set the right side stop adjustment so the rear of the armature just touches the dampening wheel. Tighten the locknut.
4. Set the dash contact and the dot stop on the armature to equal 1/16th inch movement either way at the end of the paddle.
5. Hold the paddle in the dot position until the armature stops vibrating. While still holding the dot position, adjust the dot contact to just hold continuously as indicated by an ohm meter. Tighten the dot locknut.
6. Set and lock the dot and dash return spring adjustments. Both should be fairly firm for clean code.
7. To prevent dot bounce, jam a cigarette butt into the U corner of the armature dot contact. You should get 10 to 15 clean continuous dots before the armature stops vibrating.

This needs to be in the Keynote. Bert K5KWD  
*And, so here it is! - Nancy WZ8C*

## No DX Keynote This Time

I didn't get a copy of Geo's Keynote in time to include it in this issue. I'll print it in the next issue.

## QRP With John Shannon, K3WWP

This month the final of a 3 part series dealing with DX. What about the 'minimal' QRPer calling CQ DX. Now and then a DX station will answer my regular CQ in these days of high sunspots. In fact, my most distant QSO with VK6HQ came when he answered my regular CQ on 30M one evening. I was so shocked and excited I could hardly send. Even after the QSO, I was wondering if it was really true that I worked a VK6. It was, because I received his QSL card in a couple of weeks. A couple of years later John answered my 30M CQ once again. So it does work at times, but it's an exception rather than the rule. You're better off looking for DX stations calling CQ, and answering them.

The easiest time to work DX is in contests, because the best operators in the world often go to exotic locations for contests to make themselves more desirable or just to activate some rare country. Plus you have the super contest stations in various countries operating with their huge antennas and state of the art receiving equipment. They are the ones who can dig out the weakest of signals, and are glad to do so for those few extra points they will get in the contest. Those points may just help them beat out another top notch tester. You may have a tough time beating the pileups at the beginning of a contest, but often these super contest stations almost go begging for QSO's near the end of a contest period. Then is the time you may easily work them.

Also for the week or so just before contests, many of the stations setting up for the contest will check out their equipment by working as many folks as possible. At these times they may also operate on the WARC bands (30, 17, 12) which are not available for operation in the contest itself. They often stay at their locations for a few days after contests also.

Always let the DX station dictate the type of QSO. If you answer a DX station outside a pileup, and he still sends just a report, you do the same. If he sends RST, QTH, and Name (OP), then you may be fortunate enough to find yourself with a DX rag chew. Send your QTH (maybe just the state), and name, and maybe mention you are running QRP. It doesn't happen too often, but I have had some very nice rag chews with DX stations. I recall a few I especially enjoyed. I chatted for a half hour with a German who was on vacation in the Canary Islands. A PJ2 wanted to know all about my QTH. I had a nice chat with an Italian talking about my Italian heritage (my mother is Ital-

ian). A German asked me all about my QRP rig. And several others as well. These are the DX QSO's I find really rewarding, although I appreciate the RST only ones also. You CAN rag chew with DX using QRP when conditions are good.

Getting the first 100 countries for DXCC with minimal QRP is quite easy. For my millennium DXCC award I got my 100 countries in 2000 in about 10 weeks and could have done it even quicker. I've worked as many as 85 countries in a single weekend during the big DX tests. However when you get to around 150 countries, the going starts to get rough. Getting the new ones then becomes a lot of work and can become frustrating. I'm at 193 now, and it is really rough. Most of the ones I need come with huge attendant pileups if I can find them at all. For those QRPer's blessed with a good location on top of a hill and a lot of room for big antennas, it is probably easy to move on to 250 or so countries, and at least one QRPer that I know of is on the DXCC Honor Roll. But for those of us with minimal setups, it is a good idea to try other things while waiting for conditions, luck, etc. to be just right to get a new overall one.

For example, I am trying to get 100 countries on as many different bands as possible. I recently passed 100 on 40M and need about 10 on 12M and then I'll have that goal on 40-10M. Working prefixes is also a good way to keep up interest in DX. Try to get as many overall as possible or perhaps get all the main prefixes from as many different countries as possible, for example OK1 through OK0 for the Czech Republic.

Finally one thing I mentioned last month is working islands. IOTA (Islands On The Air) is a program set up similarly to DXCC with the entities being islands instead of countries. The islands are identified like NA-062 which means North American Island # 062. That particular number refers to the Florida Keys Islands. Obviously there are many more islands than countries available to work so getting new ones is easier than getting new countries. Many islands are activated by expeditions just like DXpeditions activate countries. There are also IOTA contests to aid in working new ones. I'm out of space now, but if IOTA intrigues you check out my friend VA3RJ's web site at [www.qsl.net/va3rj/](http://www.qsl.net/va3rj/).

73 for now till next month. Visit me at [www.qsl.net/k3wwp/](http://www.qsl.net/k3wwp/) or [www.alltel.net/~johnshan/](http://www.alltel.net/~johnshan/). Write me at 478 E. High St., Kittanning, PA 16201-1304 or Email [johnshan@alltel.net](mailto:johnshan@alltel.net). -30--

## A High Frequency Vacation

"Of course I will open my backpack. No, it's not bomb making material, it's my portable short wave amateur radio gear."

I was ready and eager to show off my SG2020, cut down CB antenna, and my 12-volt gel cell battery power pack. I decided not to use my above-prepared statement after I read the sign next to the metal detectors at the entrance to the Delta Air terminal, "carrying explosive material or talking about explosive material is strictly prohibited." I guess the airport security officer was doing her job when she actually said those words "would you please open this back pack." She inspected my rig and let me head toward the gate with rest of my family. Except for a three-hour delay, the trip to Florida was a pleasant one.

We arrived late Saturday night. With less than 20 hours to go in the ARRL Cw International Dx contest my chances of taking the top prize was dwindling! Sunday morning my son needed to go swimming so off to the pool we went. Now how do you work a Dx contest from poolside? This is where my cut down (for 10 meters) CB magnetic mount antenna was to perform. I needed a metal ground plane. The tables were fiberglass, the garbage can was plastic but wait.....the men's bathroom door was metal!! The antenna stuck nicely to the door just below the men's sign. I proceeded to play catch up in the contest. First came Yugoslavia YZ1U followed by France TM5C. Using the same metal door magnetic mount technique I was able to collect another four countries VP2E, PJ2T, LU1DZ, P49V and was now racking up those contest points! The luckiest part of my setup was that nobody needed to use the bathroom!

Monday morning we were informed by the social director ( my XYL ) that we were all going to an outdoor beach side shopping area. While the ladies shopped, I had time to daydream about my portable antenna. A magnetic mount antenna is great if you have a car, a dumpster or even a metal bathroom door but as a portable antenna, it has its limits. A dipole works well

but hanging a dipole in a restricted Florida condominium community is about as inconspicuous as a fifty foot tower would be on my front lawn! Suddenly I had a great idea. Why not make a wire vertical antenna for 15 meters. All I had to do was remember that half wave dipole formula I learned 9 years ago for my novice exam. Lets see 2-4-6-8 who do we.....that's it 468 divided by the frequency! That night I cut four 11.12ft lengths of 22 gauge wire. I hung one from a tree branch and the other three I used as a ground plane. My portable MFJ-971 tuner helped to get the SWR to a perfect 1:1. This was a great performing ¼ wave vertical antenna. Using 5 watts I was able to easily work Roland, DL1LQR, who came back to my cq and gave me a 569 report. I also had a nice qso with Willy ON4LBV who sent me a 339 report. Bob KA3NIL came through with a 599 report from Princess Anne, M.D.

Portable HF has always interested me. The ability to contact fellow amateurs around the world using equipment and a power source that can easily be carried in a backpack remains a thrill. Relying on the atmosphere's transmission of radio waves is much more exciting to me than modern satellite communications. Of course working from a rare DX location using portable low power HF would be the ULTIMATE! With this in mind I am planning a family summer trip to Alaska. Maybe I will be able to attract a massive pile-up.

I hope to improve my power supply and beef it up to 16 volts since my SG2020 works up to 18 volts. I may add a few more ground plane wires to my portable 15 meter wire vertical. The MFJ-971 tuner and my TE NE KE cw key with leg attachment will complete my portable setup.

I am looking forward to the majesty of Alaska in July. Nevertheless, I am hoping that there is ample Outlet shopping so my girls (XYL and teenage daughters) don't miss me as I wander out into the wilderness as KL7/AA2VG/QRP.

By Peter S. DeLuca AA2VG



## **Any Thoughts On These? A Small Glimpse at the WZ8C mailbox**

I am Elmering a friend (previously a tech) who just got his general class license. He wants to work more CW! It's great.

He has been complaining about "nobody is going slow enough" and "they always speed up too fast!" I got on 80 tonight with him and rode along with 2 meter rigs at hand. It was fun. I was shocked at the lack of slow speed CW. 80 meters was dead. Repeated 5 wpm CQs brought nothing. It was disappointing. After many calls, a guy came back to me at 10 wpm and that was just too fast for my friend.

Several of us were talking about it on two meters tonight. "How does a ham get past the slow speed barrier when nobody operates slow speed?" The old novice bands are vacant! No signals, fast or slow, can be heard. It's a waste of bandwidth and a waste of good CW potential enthusiasts out there. It's true. There is nobody to work at QRS.

The group had a thought. What if FISTS offered some sort of award for "at least one slow speed QSO per night." or "Slow speed requirement for membership." It would force some of the old timers to shift into low gear and Elmer the next crop of FISTS members. I think this is important for the future of the Novice bands and the future of CW. I was hoping to find a way to post this or similar message on the FISTS site. Can you accommodate? Ford-N0FP

*I agree with Ford about using the Novice Frequencies. I know some areas battle SSB QRM and broadcast noise in their area, but not all the time, and not all over the country. How can we get more people up on the Novice subbands? Why is there such a stigma against going there? If just 10% of FISTS called CQ FISTS up there instead of crowding around the .058's there would be an incredible amount of QSO's going on in those areas!*

*As far as "slow speed required for membership"*

*I think that's going a bit too far. We have several slow speed nets, as well as the Code Buddy program, as well as a RagChewing award.*

*There's nothing wrong with practicing code off the air to help you learn the code better. Once someone gets instant recognition of the alphabet, his speed is bound to pick up. How about a code practice net on two meters?. Many clubs have instituted code practice on their local repeaters with great success.-- Nancy WZ8C*

Dear Nancy:

I have been thinking on this for a long time, but not sure how to bring it up without looking like "something".

Reading letters to editor in April Worldradio, about ten meters and afraid, same thing is going on with FISTS.

Few weeks ago, I called a station after he was thru with QSO, and first thing he asked if I was a FISTS and so I asked if he would QSO if not a FISTS, and he asked again, and I answered the same and he QRT. HI HI

Sure it was funny to me, but what about a new CW op or a op came on freq to see what FISTS all about. Not the best way to promote FISTS, HI HI

Guess you can see what I mean, and maybe blow it up too much. Just happened to hit home when read that about 10-10 club members.

88 JACK WB2FXK

*Well, Jack...With the FISTS numbers and Awards, we're darned if we do and darned if we don't. If we don't have lots of awards, then people complain they don't have anything to work for or to challenge them. If we do have awards, then people complain that all people want to do is get their number and run off. Luckily, even though we have people on both extremes of this spectrum, the majority of FISTS fall in the middle. They enjoy working for wallpaper, but also enjoy chatting. I don't know what we can do to discourage the "hit and run" QSO's - try calling CQ on the Novice subbands. I hope more people will be up there ragchewing and making use of the full bandplan before we risk losing it!*  
- Nancy WZ8C

## What Time Is It, Anyway?

Keeping track of what time it is isn't easy these days. Moving back and forth between Standard Time and Daylight Savings Time messes me up for weeks. Being a ham makes it even more confusing, because we have to work with time zones. People talk about Zulu, UTC, GMT, Military time...how are you supposed to know what time anything is happening?

I suspect there are more than a few hams who have questions. One clue came when I got this letter: "What time is 1900Z? What if it is not "Z" but any other letter? I know I should know this, but it has never been explained to me."

Let's start with decoding the abbreviations. UTC stands for Universal Time (Coordinated). GMT stands for Greenwich Mean Time. You may also hear WET, or Western European Time. Z stands for Zulu, which is the phonetic abbreviation for all of these. The good news is all these terms mean the same thing. The bad news is that whenever you see a time listed as UTC, Z, or GMT, it means that is the time in Greenwich England. Why should you care what time it is in Greenwich, England, of all places? And why do we use Z (Zulu) to stand for GMT?

This is going to be a very simplified explanation and it's hard for me to explain without a globe to point to, but here it goes:

Greenwich Mean Time (GMT) was adopted by the United States on November 18, 1883 when the telegraph lines began transmitting time signals to all major cities. Before that there were over 300 local times in the USA. Greenwich Mean Time (GMT) was adopted universally on November 1, 1884 at the International Meridian Conference in Washington, DC. They drew up the International Date Line and created the 24 time zones.

Each one is 15° of Longitude apart as measured East and West from the Prime Meridian of the World which is located at Greenwich, England. These are designated by three-letter abbreviations

(like, EST) for most time zones. These are also abbreviated by a different of the alphabet (except 'j') and are known by their phonetic equivalent.

The first Longitude line going East from Greenwich (France) is "a". The next zone after that (Finland) is called "b", and so on. Eastern Standard (EST) falls into the "r" zone. Greenwich is "z" or Zulu. If you have a time wheel type converter, that is what the letters of the alphabet on it stand for -- the different time zones of the world.

**To figure out what time it is in YOUR part of the world, you have to subtract hours from the time in Greenwich.** To make it easier to do this, it is generally accepted to speak of time in Military time, which is a 24 hour clock. 0100 is 1 a.m.; 0130 is 1:30 a.m.; 0200 is 2 a.m., up to 1200 which is noon. Can you guess what 1 p.m. would be? That's right - 1300! 11 p.m. would be 2300. It follows that midnight is 2400 or 0000. Either is socially acceptable. But the minute after midnight is 0001. Some military branches say there is no 2400, but I'm not going to quibble here, we just want to get the basic concept clear.

This is pretty straightforward, but can get confusing when subtractions move you into the day before. For example, let's say a contest starts at 0300 Z June 12. To find out what time that is in **Eastern Daylight Time** we see on the chart that we have to subtract 4 hours. If you look at a clock and move back 4 hours from 3 a.m. you'll see that it takes you back to 11 p.m. or 2300Z. But, that makes it the NIGHT BEFORE June 12. So, the contest would start at 11 p.m. June 11. It's not difficult, you just have to think it through.

The smaller chart included here will give you the time in Daylight Savings Time, the larger one is for Standard Time.

I hope this helps take the mystery out of UTC and it's variations. Take some time and get familiar with it. It makes hamming more fun when we're all on the same time wavelength,, and you won't be late for contests and Special Events!

Nancy WZ8C

Subtract these many hours from UTC to find  
DAYLIGHT Saving Time in your zone

( Days:Hours:Minutes:Seconds )

-00:08:00:00	America/Anchorage
-00:05:00:00	US/Central
-00:04:00:00	US/Eastern
-00:06:00:00	US/Mountain
-00:07:00:00	US/Pacific
+00:00:00:00	UTC
+00:00:00:00	Zulu

UTC (GMT)	PACIFIC STANDARD	MOUNTAIN STANDARD	CENTRAL STANDARD	EASTERN STANDARD
00	4pm*	5pm*	6pm*	7pm*
01	5pm*	6pm*	7pm*	8pm*
02	6pm*	7pm*	8pm*	9pm*
03	7pm*	8pm*	9pm*	10pm*
04	8pm*	9pm*	10pm*	11pm*
05	9pm*	10pm*	11pm*	12mid
06	10pm*	11pm*	12mid	1am
07	11pm*	12mid	1am	2am
08	12mid	1am	2am	3am
09	1am	2am	3am	4am
10	2am	3am	4am	5am
11	3am	4am	5am	6am
12	4am	5am	6am	7am
13	5am	6am	7am	8am
14	6am	7am	8am	9am
15	7am	8am	9am	10am
16	8am	9am	10am	11am
17	9am	10am	11am	12 noon
18	10am	11am	12 noon	1pm
19	11am	12 noon	1pm	2pm
20	12 noon	1pm	2pm	3pm
21	1pm	2pm	3pm	4pm
22	2pm	3pm	4pm	5pm
23	3pm	4pm	5pm	6pm

# SLAMMER



solid rod with hole drilled off center, adjust like cam

OR; USE: ROUND-  
WOOD DOWLING.

## BUFFER #1 & 2



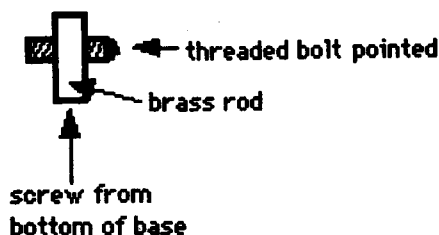
solid rubber spacer with hole drilled off center, adjust like cam

HAMMER-FLAT; BITS OF SILVER SOLDER. SOFT-SOLDER ON FOR CONTACTS.

I used electrical terminals and ink pin springs for paddle return spring.

USE SEVENTY FIVE CENT COPEING-SAW BLADE. FROM ANY HARDWARE STORE.

## DIT/DASH POST

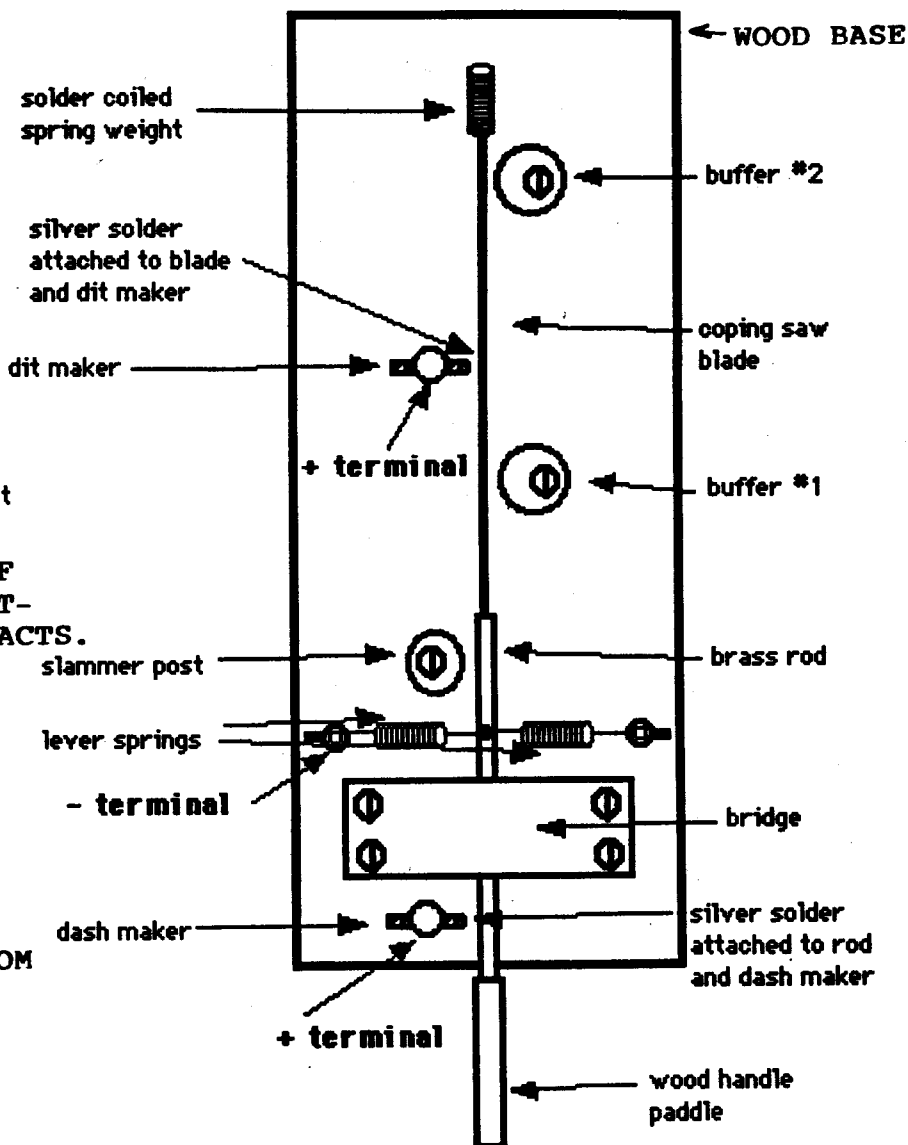


USE NAIL & HAMMER, TO MAKE A DIMPLE-BEARING, IN ALU PLATES. MAKE THE POINTED TIP ON SCREW, BY FILEING TO SHARP POINT TIPS. (2)

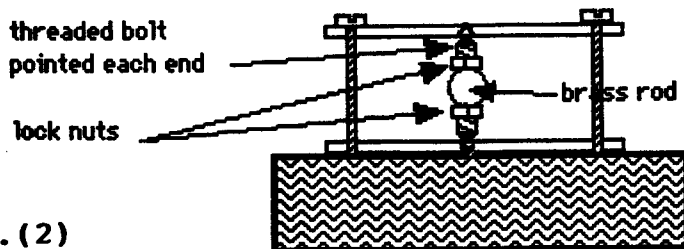
# Saw Bug

SIMPLE & CHEAP !!

## TOP VIEW



## BRIDGE CONSTRUCTION



# April - FISTS Down Under by Ralph ZL2AOH

## Membership

We extend a warm welcome to new member **ZL1MAD-Dusty Miller-9051**. Dusty lives in Whitianga. He has been heard calling CQ FISTS within a day or so of receiving his number. We hope that Dusty will send a few biographical notes for inclusion in a later newsletter.

## Members' News

**ZL4PO-Lester-9044** found this amusing piece on the Internet: Some of us have been in the hobby for a little too long. This problem is very simple to detect; you just need to know where to look.

You know you've been a ham too long if:

- You pick up the phone and answer "QRZ?"
- You have enough ham magazines lying around to pile them up and use them as dining room chairs.
- You find yourself copying people's horn blasts during rush hour as CW. Even worse, you find yourself copying people's horn blasts during rush hour as CW, and you honk back at them at 50 WPM.
- During the last Space shuttle launch broadcast, you looked at the launch gantry and imagined it as your twenty-band Yagi tower. (Dreams are free)
- You celebrate more during Field Day than at Christmas or New Year.
- You don't bother shutting your radio off when you're not using it because you will be back in a minute with a Coke and a slice of pizza.
- You have a 2-meter handheld in every room of the house.
- You have installed coax connections next to every phone line.
- Your logbook collection rivals the local library.
- You have enough old tube transmitters to light the house with.
- Your wallpaper covers all the walls in the house.
- You have personally funded eight OSCAR satellites.
- Your shack is actually a shack in the backyard because the XYL kicked you out of the house.
- Your neighbours think that your RFI and TVI came with the house.
- Your other neighbours don't complain because they are on the same transformer as you, and whenever you transmit, their whole house has a blackout.
- You've memorised the contest dates for the rest of the millennium, but you still forget your relatives' birthdays.
- Ham Radio Outlet has offered you partial ownership and a permanent parking space at their store because you visit so often.
- You have bought out the frame store down the street with frames for your awards.
- Your ham radio station is worth more than your house.
- You have trouble running all your mobile antennas in from the roof of the car.
- Dick Smith gives you a 50% discount on the Parts section because you come so often.
- You've been president of four amateur radio clubs for forty years, gone to four hundred meetings, and met four thousand people.

**ZL2UB-Don-9037** sent QSL cards for forwarding. One was addressed to "VK2YN Lindsay FISTS #1730". This fellow is not a FISTS member. #1730 is KR5C-George. VK2YN is listed in the 1999 Call Book as J R Watt-bright, 1 Downing Street, Picton NSW 2571. "J R" doesn't sound like Lindsay!

*We've logged the guy earlier this year but he didn't give a name; only the QTH and he didn't claim to be a FISTS member.* On being told of the mystery, Don's reply included: Re VK2YN — this was a bit of a mystery to me, as I couldn't find the call in the FISTS Members List, and did wonder what was going on. I have heard that station a couple of times since my QSO, but not on FISTS contacts, so didn't get a chance to hear his number again. Next time I hear him I will try to QSO and see if I can clear up the matter.

As far as QRP goes, I very seldom now use anything else. I started on the low power operation some years ago after failing to solve an acute 20 mx TVI problem, and in spite of making up every high-pass filter whose circuit I found as well as buying commercial ones, making braid breakers, designing and making a whole series of low-pass filters as well as buying commercial ones, talking to anyone whom I found with similar problems, and having my whole set-up checked twice by RIs, I just couldn't get on top of the problem. I have made Chelmsford tcvr's for both 80 and 20 mx, but now seldom use them as my little IC 706 works down to 4 watts without recourse to my h/b power attenuator and that is now my standard power, CW of course. I have heard you calling a couple of times on 20 mx, but with a very weak signal here, as the 20 mx skip between us pretty much nil, so I haven't attempted to reply to your CQs, Ralph. However, I'm sure that it's only a matter of time until we do QSO on other bands.

A message was sent to **G3ZQS-Geo-0001** the fount of all knowledge, to find if he had any knowledge of the mysterious Lindsay. Geo replied as expected that the number belonged to KR5C-George. Geo also reported on things over in England: Yes, as you have probably heard on the news bulletins, the situation over here in Blighty is pretty grim. We appear poised to the wholesale slaughter of every hoofed animal on the island. It has crept over to France and Holland so far but the signs are not good and the whole of Europe is in for a rough time if the authorities do not act fast enough.

Weather has generally followed the season. This being spring, the trees are budding on time, squirrels round here are beginning to play 'catch me if you can', Crows are investigating their old nest sites and magpies are gathering material but there is a sorry lack of the usual songbirds. Mind you, we did have a few days of unexpected snow and deeeeeeep frosts which they could be in some way tuned in to.

**ZL1DD-Barry-9029** reports: Great fun here, have finally got my Force 12 C-4SXL beam up and now have two elements on 10,15, 20, 40. It was used to great effect by Bob G3PJT disguised as ZL4CC in BERU.

I have been making comparisons on received sigs between the beam and my 80m inverted Vee with tuned feeders just below it. Beam is clearly superior on its dedicated bands, but the wire Vee dipole is remarkably good for what it is and beamless ones should not be downhearted, in my opinion. From a cost effectiveness and versatility point of view the dipole is a clear winner.

I have two old time parallel tuned link coupled antenna tuners for the dipole, one 3-10MHz and other 14-30. Coils 1/4in copper tube. Jump the feeders between them with a genuine brass and porcelain DPDT knife switch! Looks like something from the 1930s and works wondrous well.

I have added a ZL1DD section to my web site and will expand it as time goes by. < [www.waiheke.co.nz/signal.htm](http://www.waiheke.co.nz/signal.htm) >

A nice message came from **W6IEU-5969-Kén**: Received our US KEYNOTE today. Was reading your newsletter. You have a very interesting way of describing the Down Under news. I am sure your fellow hams think so also. All the very best.

#### **FISTS Down Under Net**

On the **first Monday of each month** the FISTS Down Under net will be held at **21:00 NZST, (09:00 UTC.)** on a frequency of **7.038 MHz**. On other Mondays during each month at the same time, there is an opportunity for members to make FISTS contacts knowing that it is likely there will be someone listening at that time.

The first net on 2 April 2001 was a success but not many turned up. It was a good opportunity to swap FISTS numbers. Don't miss it in future. The next will be on 7 May.

#### **Morse Font**

While searching on the Internet for a font that would display the euro currency symbol, I came across this at the address <http://www.matchfonts.com/pages/morse.html>

Most of us boy-scouts or radio enthusiasts had at one point in time some experience of the Morse code. My own Grand-Father was a ham radio before last world war, and of course did quite some traffic on the short waves length before it was even thought about cellular phones. That's how I discovered Morse code, when still a kid, in the mysterious environment of wireless communication contraptions, at the same time others kept pet bullfrogs. From our remote corner of France (St Leonard de Noblat, near Limoges), we waited until midnight to contact America, and I stood shivering of excitement and sense of epic behind my Grand Father shoulder while he was talking to that mythical remote country over the ocean...

Every computer user should be ever so thankful to all these pioneers, who created the very first network of free electronic speech, much before our current Internet. Before Cyberspace, was a warm, cheerful and picturesque world of large aerials, ground poles and tickers, which linked individuals around the world. And, no doubt, if these radio-loonies (they where not yet computer freaks) had not spent years painfully tuning their tubes, adjustable coils and variable capacitors, much of modern satellite communication might be much less efficient. SSB and other techniques where invented by ham enthusiasts, even if nowadays engineers have no idea it was the case.

So, when my electronic friend Gary asked me over e-mail for a Morse code font, I thought already dozens of them where available across the ham community. It does not seem to be the case. So, here is my contribution to the communicating people of the wireless world.

*The site includes an order form that allows purchase of the font for \$US 19.95. "FISTS Down Under will not be purchasing a copy!*

#### **Editor's Activities**

During a QSO with **JE1CLH-Mack-9012** he commented that he would not normally be able to join the monthly Fists Down Under net on 7.038 MHz as it was outside the normal Japanese band plan for 40 metre CW. Having consulted a copy I have of the Japanese band plan, from the time I lived there and was 7J5AAN, I sent the following to Mack:

"I am looking at my copy of the JA band plan that the JARL gave me. It shows that above 7.030 MHz the band is shared between AM and CW, so I can't see why you should not be able to join the FISTS net and transmit on 7.038 MHz. - Have I read it correctly?" Mack's interesting reply was:

"Yes as you said above 7.030 MHz the band is shared between AM and CW, but in JA, as you know 40m is a very busy band. Some SSBers blame CW-stations which QRV above 7030. Of course their blame is not reasonable; perhaps they misunderstand the band plan. Generally speaking, there is no clear space we can work CW above 7.030 MHz in JA. Of course I can QRV on 7.038 and be prepared to quarrel. Hi! It is a shame that some JA SSBers are not gentlemen. However if the frequency is clear that day by chance, I will call you with 1kw. Hi! I hope you understand my explanation."

I spent a couple of hours in the Commonwealth Contest that was featured last month. It was worthwhile to work a couple of new countries (Malta and Cayman Islands.) I submitted my log for check purposes and received a nice friendly thank you note from the RSGB contests manager. I heard a few ZL FISTS stations working, but surprisingly none of the DX stations I worked was a FISTS member. I took the opportunity of sending a FISTS brochure to each of the VK stations I worked. There has been no immediate response.

Please remember to check your details in the attached membership list and notify me of any errors or omissions. If your e-mail address is not listed please let me know as occasional notices are sent out during the month. Also, keep those letters coming in; other members are very interested in your news and views.

That's all folks. 73 de ZL2AOH

# FISTS SPRINT

The following are the Official Rules for the FISTS SPRINT.

**OBJECTIVE:** To exchange specified information with as many U.S. or Canadian FISTS members as possible, using Morse Code only, and within the time frame stipulated.

**PARTICIPANTS:** Any properly licensed amateur radio operator, FISTS member or non-member is invited to take part in the contest. At least one of the two stations in each QSO must be a U.S. or Canadian station.

**DATE AND TIME:**

The Winter SPRINT will run from 1700 UTC to 2100 UTC on Second Saturday in February.

The Spring SPRINT will run from 1700 UTC to 2100 UTC on Second Saturday in May.

The Summer SPRINT will run from 1700 UTC to 2100 UTC On Second Saturday in July.

The Fall SPRINT will run from 1700 UTC to 2100 UTC on Second Saturday in October.

Please note times are in UTC; daylight savings time is NOT a factor.

**BANDS:** Operation is limited to the following amateur bands: 3.5, 7, 14, 21, and 28 MHz amateur bands. Work stations only once per band.

**ENTRY CLASSES:** There are three entry classes. — QRP which is limited to 5 watts output power or less; QRO is over 5 watts output power, and Club entries (regardless of power). Entry class MUST be shown on logs to be considered for entry in a particular class, or will be assumed QRO. An entry must be ONE class only. No combination of classes is allowed.

**EXCHANGE:** The following information must be exchanged by both stations to count as a valid contest QSO —

For FISTS members: first name, RST, U.S. state/Canadian province/DXCC country, FISTS number.

For non-FISTS members: first name, RST, U.S. state/Canadian province/DXCC country, Power output.

**DX COUNTRY STATUS:** U.S. states and Canadian provinces are those states and provinces that are contiguous and found within the North American continent. DX are those entities listed in the current ARRL DXCC publication, other than the above.

**SCORING: QSO POINTS:** Each QSO with a FISTS member counts 5 points. Each QSO with a non-FISTS member counts as two points.

**MULTIPLIERS:** Each U.S. state or Canadian province counts as one multiplier — count each only once, no matter how many times worked. DX countries count as a multiplier each time worked. If a DX country is worked several times on different bands, each QSO counts as a multiplier.

Sending the logs is what counts, and they will be spot checked for accuracy and correct scoring procedures.

Logs not sent to the proper address will NOT be considered for entry.

Please send only paper logs. I have no way to cross reference disc logs. Disc or e-mail logs will not be considered for the contest, and will not be returned.

**ENTRY FORM:** Complete rules and an entry form are available for downloading at the FISTS web site <http://www.fists.org/>. The entry form is not mandatory, but all info must be included with your log.

(To save the form, do a FILE/Save as and put it on your hard drive)

Send log and forms to:

**Dan Shepherd, N8IE**  
**1900 Pittsfield St.**  
**Kettering, Oh 45420**

FISTS SPRINT ENTRY FORM Entry Class QRO \_\_\_\_\_ QRP \_\_\_\_\_ CLUB \_\_\_\_\_

SCORING: \_\_\_\_\_ QSO points X \_\_\_\_\_ multipliers = \_\_\_\_\_ final score

CLUB NAME \_\_\_\_\_

CLUB FISTS Number \_\_\_\_\_

YOUR NAME \_\_\_\_\_ CALL \_\_\_\_\_

YOUR FISTS Number \_\_\_\_\_

ADDRESS \_\_\_\_\_

Email Address(optional) \_\_\_\_\_

### MULTIPLIER CHECK-OFF LIST

1	2	3	4	5	6	7	8	9	0	VE	DX
CT	NY	DE	AL	AR	CA	AZ	MI	IL	CO	NB	NF/LB
MA	NJ	MD	FL	LA		ID	OH	IN	IA	NS	NT
ME		PA	GA	MS		MT	WV	WI	KS	PE	YK
NH			KY	NM		NV			MN	QC	BC
RI			NC	OK		OR			MO		ON
VT			SC	TX		UT			NE		MB
TN						WA			ND		SK
VA						WY			SD		AB

Please enclose paper logs ONLY, photos, comments, ideas, etc., with your entry and mail promptly to: Dan Shepherd, N8IE, 1900 Pittsfield St., Kettering, Oh 45420

Statement: ***"I have observed all FISTS Sprint competition rules as well as all regulations for Amateur Radio in my country. My report is correct and true to the best of my knowledge. I agree to be bound by the decisions of the FISTS Awards Committee."***

Signature \_\_\_\_\_ Call \_\_\_\_\_ Date \_\_\_\_\_

COMMENTS: