

*Delivered as a .pdf e-mail attachment only. Please forward to friends & Club Lists
(If photos and graphics are not clear on your screen, print it out - they will look great!)*



The Moonshiner

**Linking Amateur Radio Operators Throughout
Southwest Florida**

• News • Features • Classified Advertising

**Official Publication of the Southwest Florida Chapter 10-10 International
and the Southwest Florida Moonshine Net**

VOLUME 1, ISSUE 6

NOVEMBER 2007

Moonshiners Gather for Evening of Fun and Food

On Saturday evening, October 13, 35 Moonshiners and their XYLs gathered at the Olympia Restaurant in Port Charlotte for a gala event of fun, food and friends. The event was the first of its kind for the Southwest Florida Chapter of 10-10 International but not the last. Members unanimously voted to make this a semi-annual dinner with one in the winter, when our snow birds are here and one in the late summer for us sweat hogs.

NET CONTROLLERS HONORED

No net can be successful without a dedicated group of net controllers, and our terrific twelve do a great job. Each received a special Moonshine Net badge noting their honored position.

And then came the food. There was no set menu. Everyone ordered from Olympia's large selection. Service was fast and the food was good. And the moonshine consisted of wine or beer. No hooch here sorry.



Exhaulted Grand Poo Baa, 10-10 Southwest Florida Moonshine Chapter Head, Dennis Lazar, W4DNN (R) and Supreme Net Commander, Moonshine Net Manager, Randy Hyatt, KC3CH, award badges (in the plastic bag) to our net controllers.

WE PASSED THE BASKET

Following the dinner and the awards ceremony, Dennis Lazar, the Poo Baa, passed a collection basket. "We have no dues, no treasurer and no charge for certificates, so we need to ask everyone to toss in a dollar to fund our chapter activities," he said.

When the loot was counted, we had \$60.25. There were several 5's and 10's and one quarter. We especially thank those who gave over and above.

The funds will be used to create a new net membership certificate boasting a classy gold seal as well as QSL certificates for DX stations.

Certificates will be free to members and will be mailed free to anyone who e-mails, phones, faxes or mails the dates of 10 check-ins to the net. However, there will be a charge for DX QSL certificates.

Continued on page 2



The Ol' Moonshiner himself, Gino Ferranti, KE4TJO with net mascot, Sparkey the Wolf Hong (no it's not Alf!)

Good Food, Great Friends and Lots of Fun at the Gala Moonshiner's Dinner





The Moonshiner

*Linking Ham Radio Operators
Throughout Southwest Florida*

Editor/Publisher: Dennis Lazar, W4DNN
 Layout: Ruth Lazar
 Contact: W4DNN@arrl.net
 941-624-6373 (leave message or fax)

The Moonshiner is the voice of the Southwest Florida Chapter of 10-10 International and the Moonshine Net. All Amateur Radio Operators are welcome. Net Manager is Randy Hyatt KC3CH. If you would like to be added to The Moonshiner e-mail distribution list, send your e-mail address. To send ads, photos, news, articles, etc. send to our e-mail address above. Download The Moonshiner from {arrlwcf.org} go to bottom of page under WCF Club News.

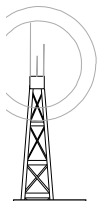


Continued on page 3



Station Photos Wanted

Take your picture in your shack with a digital camera and send as an attachment to: W4DNN@arrl.org. Scan that old photo of your station in the 50's or 60's and send it along. Everyone loves boat anchors! We'll publish photos as space allows. We'd all love to see each other in action on the other end.



The NCDXF/IARU 28.200

International Beacon Network

Each beacon transmits in sequence at reducing power levels over three minutes. (Argentina and Peru not included, May be QRT. See article for details.

4U1UN United Nations, NYC
 VE8AT Nunavut, Canada
 W6WX San Jose, CA
 KH6WO Oahu, HI
 ZL6B, New Zealand
 VK6RBP, Australia
 JA2IGY, Japan
 RR9O, Russia

VR2B, China
 4S7B, Sri Lanka
 ZS6DN, S. Africa
 5Z4B, Kenya
 4X6TU, Israel
 OH2B, Finland
 CS3B, Madeira Isl.
 YV5B, Venezuela

Remembering: The Good Ole Ham Rigs You Loved and Your Current Love

How many of you have had a love affair with a brand name or type of radio? I have been a loyal Yaesu owner since my first FT-101B back in 1973. Get out your digital camera and take a few photos of yourself with your current rig. Let me know what old rigs you loved and I'll find the photos of them.



*FT-101B Vintage 1973
My first solid state rig
I sold it in 1985*



*FT-707 Vintage 1980
currently in shack*



*FT-757GX Vintage 1985
currently in shack*



*FT-100D mobile/portable rig
Vintage 2000
currently in shack*



*FT-817ND QRP rig Vintage 2000
currently in shack*



*FT-1802 2-meter Vintage 2006
Currently in truck*

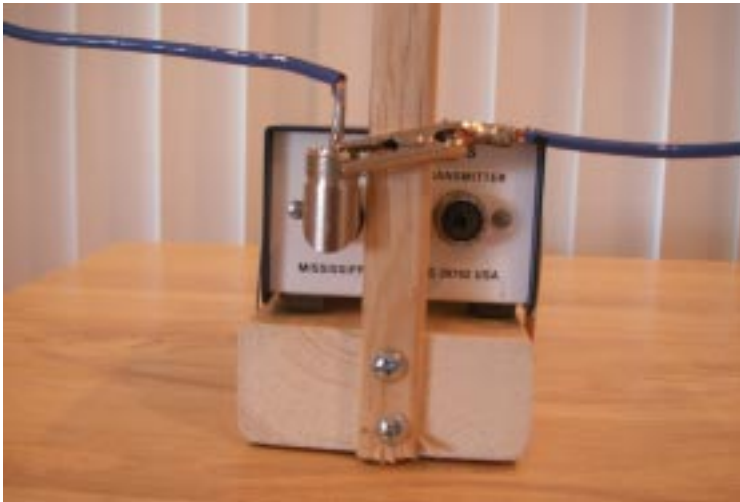


*FT-2800 2-meter Vintage 2003
Currently in car*

A Super Looper table-top Antenna for 10 Meters and Beyond

A loop antenna made from two sticks and a seven foot piece of wire? Can't really do much. Or can it? In their advertising for small, high efficiency loop tuners, MFJ Enterprises claims that you'll radiate a low angle DX signal that literally rivals full size dipoles and work incredible DX!

Can it be true? I decided to try it on the cheap. Since I already had a little MFJ mini random-wire tuner, all I needed was a piece of wire, a few sticks and a 2X4 to attach it to. MFJ markets a line of full power loop tuners which make use of extremely low loss butterfly tuning capacitors with no rotating contacts. These units are rated at 4200 volts RMS. Because I planned to run QRP, my little tuner was safe. But at 100 watts, there would be well over 10 amps of RF current flowing through the loop and the tuner. To use power, you really do have to shell out the \$200 to \$260 for a real loop tuner.



Input from the transmitter is through 52 ohm coax while the output is direct to the two ends of the loop. The tuner becomes part of the antenna, like a big tank coil.

A LITTLE LOOP THEORY

A small transmitting loop antenna has a conductor length or circumference of less than 1/4 wavelength. When properly designed, the small loop can have performance close to, or even exceed that of a full-size antenna, depending on mounting location. The small loop radiation pattern is maximum along the plane of the loop, with sharp nulls perpendicular to the plane of the loop.



Matt, N8RZZ gave me an S5 and Reinhold, KS4ST an S7 with this table top loop in the front yard. At Randy, KC3CH's, I was 20/9.

A circular loop has about 10 percent higher gain than other shapes (such as a diamond) because gain is directly proportional to the area enclosed by the loop.

These antennas also enjoy significant rejection of undesired signals and noise. Height above ground is not critical and no ground or radials are needed.

But, there are trade-offs. Tuning is very sharp and bandwidth is very narrow. Efficiency can suffer unless care is taken in the design and setup of the loop system. As an example, there can be thousands of volts generated across the tuning capacitor due to the high-Q circuit. Radiation resistance is very low because the loop is small compared with a full sized antenna. So very high RF currents will flow in the loop - in the order of tens of amps at the 100 watt power level.

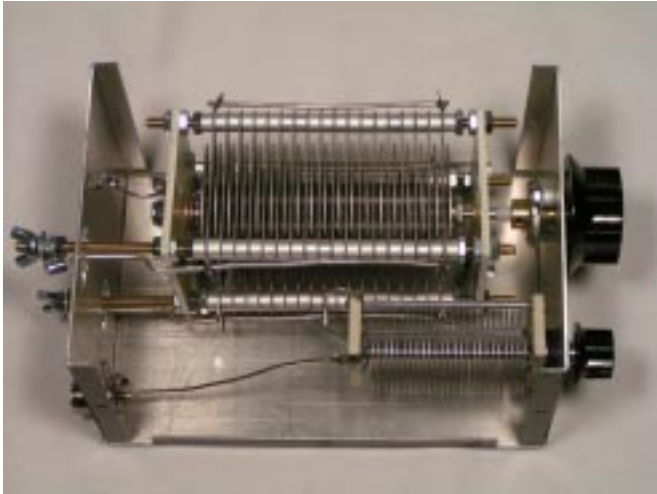
PROPER LOOP SYSTEM DESIGN

To mitigate these issues, one must use large gauge low loss antenna conductor, minimize

Continued on Page 6

Continued from page 5

all loop connector interfaces, and use wide-spaced air-variable tuning capacitors which have no mechanical wiping contacts in series with the RF signal.



The MFJ low loss butterfly capacitor rated 4200 V



The MFJ 933 150-watt loop tuner retails for \$189



Back view shows antenna connections.

ANTENNA CONSIDERATIONS

For portable operation, trade-offs in antenna efficiency can be made where true portability is desired. In this case, wire loops (as opposed to tubing) may make the most sense. Ten gauge wire should be the smallest wire used, as this can be a good trade-off of efficiency versus size, weight and portability. If one were to use 1/4" copper tubing, the efficiency would be double!

For the Super Looper, I used #12 stranded wire because it is easy to roll up in the suitcase we will take on our upcoming cruise. It connects to the tuner by simply plugging one end into the center of the coax connector and the other alligator clips to ground.

WHAT MFJ SAYS

"Drape a wire around a bookcase and attach both ends to this new MFJ-933 Small High Efficiency Loop Tuner, Jr. \$179.95. It instantly turns into a small, high efficiency multiband transmitting loop antenna!

You can operate 5.3 to 29.7 MHz with a full 150 Watts. No ground, radials or counterpoises needed. A 13-ft wire formed into a loop operates 30-20 Meters (4-ft for 17-10M; 7-ft for 20-15M; 28-ft for 60M).

You can tune any shape loop -- circle, square, rectangle, any odd shape. A quarter wavelength wire shaped as a circle is the most efficient.

A fixed wire length covers about 1.5 to 1 frequency range (i.e. 28-18 or 10-7 MHz, etc.). Exact frequency coverage depends on wire length, loop shape and environment.

The excellent performance of a small high efficiency loop antenna is well known and well proven by users all over the world.

You'll radiate a low angle DX signal that literally rivals full size dipoles -- work incredible DX! It is also a very quiet receiving antenna. It responds to magnetic fields and not electric fields so you'll hardly notice static crashes during a storm. Its high-Q rejects out-of-band interference and reduces overloading, and harmonics.

It's perfect for apartments, hotel/motel rooms, antenna restricted, and portable locations -- it really gets out!

Solar Cycle 23 Still Bottoming Out

Cycle 24 Waits in the Wings

Zero, zero, zero sunspots for 18 straight days now. A single sunspot appeared briefly October 6-7, no sunspots for four days prior, one sunspot for the final few days of September, and none for the three whole weeks prior to that. Until recently, many of us thought the solar cycle minimum occurred in March of this year. You can see a table of projected smoothed numbers with a minimum in March 2007 at, <http://tinyurl.com/27j2fs>. This year we began looking at a table of 3-month sunspot number averages, and for a while the data seemed to support a March minimum. But then we hit this longer period of no sunspots, and the 3-month average dropped again.

With a long period of few sunspots, at the beginning of November we might see a much lower 3-month average. This is because the sum of all the daily sunspot numbers from August 1 until now is only 492, and if we still see no sunspots through next Wednesday, that total divided by the number of days for August-September-October (92) is only 5.4.

SO HOW LOW IS IT?

So how low is 5.4, compared to the last solar minimum? I looked at averages between December 1995 and April 1997, and the only time the 3-month average of sunspot numbers dipped below 10 was in 1996, But this doesn't really tell us when solar activity will increase, just that we are currently seeing lower overall sunspot activity than we did at the last solar minimum eleven years ago. With no sunspots, it is sometimes amazing what hams can work on the air.

TEN METERS PERFORMS ANYWAY

October 25, Chip Margelli, K7JA reported from Southern California, "10 meters opened up from California to Europe and Africa for the first time in a very long time. Besides the loud Caribbean stations, CT1CJJ, CU2AF, GM3POI, MM0SJH, CU3EQ,C52C, and 5H3EE, there were great finds on 28 MHz between 1900-2000z." K7SS in Seattle reported that mid-day West Coast time, he heard C52C on10 meters and heard K7RI work him.

From ARRL

Club Members Receive Geezers in Space Award

Deserving members of the Peace River Radio Association received a special award at the September meeting from the Moonshiner Magazine in honor of the 50th anniversary of the launch of Sputnik, Earth's first artificial space satellite.

Moonshiner editor, Dennis, W4DNN presented a short talk on Sputnik and its impact on the world and on young hams and hams to be. Not only did Sputnik energize the U.S. space program, but motivated a whole generation of youngsters to become engineers, scientists and, of course ham radio operators.

The Moonshiner Magazine

Geezers in Space Award

Awarded to

For being old enough to have heard

SPUTNIK

first man-made Earth satellite
on October 4, 1957
20.005 Mc.

Award conferred by:
Dennis Lazar
W4DNN: Editor, 10-10 Chapter Manager
Randy Hyatt
KC3CH: Net Manager





QRV - From The Editor 50 Year After Sputnik

Dennis Lazar
W4DNN

Fifty years ago, on Oct. 4, 1957, the soviet union launched Sputnik 1, The first artificial object in space. This technical achievement shocked us into action, triggering the space race between the world's super-powers.

Ham radio operators and SWL's were the first to hear Sputnik's signals coming from space. We were the only guys and gals who had receivers capable of picking up the satellite's 20.005 MC signal.

Why 20.005? - many hams and swls were using receivers dating back to WW2. They weren't very accurate. So, the soviet engineers probably figured that putting Sputnik only a few KC from WWV's 20 Mhz signal would assure that anyone familiar with radio would be able to find and hear it.

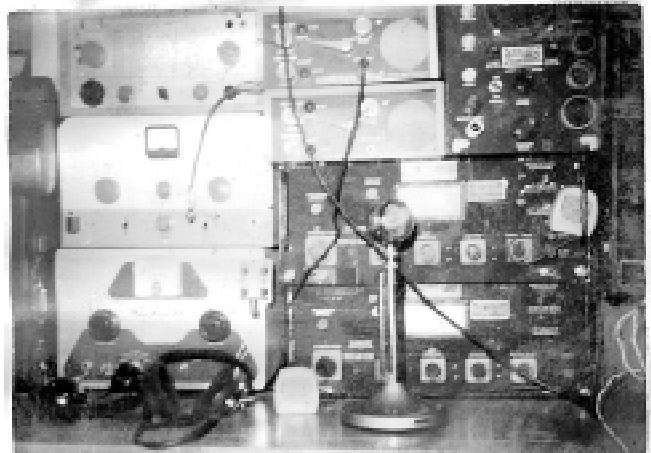
Those of us who actually heard it listened for hours as, every 90 minutes or so, it came over the horizon of our QTH's with its beep beep beep, two beeps per second. It wasn't a message actually, but it did send a huge message. Many of us young nerds began to dream.

Back then, we had big dreams. And some of you, engineers of the greatest generation, turned dreams into reality and we sent men to explore the moon. But then, because of politics and apathy, we let it all turn into dust.

We need a generation to dream again. What we really need is to get humanity off this planet and moving outward. First, in case that big asteroid hits, and second, because when mankind is exploring, he is not fighting.

Today, we are talking about Mars, but there seems to be a lack of urgency and excitement. Our younger generation of today is more excited about downloading rap music, video games, i-pods and text messaging than about rockets and exploring distant planets. Outer space is a fantasy as Star Treck, Star Wars and Star Gate give kids the feeling that its all been done already. Same old thing--Nothing new.

And, of course, if you have failed to notice, Iranian President Achmed Amadimijad begins and ends



Wow, was I excited when I heard that signal from outer space. It was the beginning of a lifetime in ham radio. Here, I'm holding a 4-1000 final amp tube and a mercury vapor rectifier tube from my 6-meter KW

each speech with a prayer for the return of the fifth emam. And, he believes that before this can happen, the world must be plunged into worldwide war and chaos and the Great Satan (us) must be brought to our knees. He hopes that out of all this we will emerge wearing towels and going to work on the backs of camels.

It has been 50 years since Sputnik. And it is time for America to end its inward focus. As in 1957, it is up to us to use our resources and our intellect to somehow bring mankind kicking and screaming off this tired little planet, outward into the solar system and eventually the galaxy. America really needs once again, to recapture the dream.

WD4A Builds Suitcase Antenna

K4XT said my signal was peaking at 10 dB over S9, this morning, during our sked on 7.159 MHz. I was running barefoot at 100 Watts.

Believe it or not, using this antenna on 20 meters a few years ago, from my mother's house in Brandon, FL, I was able to be heard very well during an SSB contest by stations all over the world. I can't remember for sure but the contest may have been the CQWW. I was astounded that it worked so well.

I built this antenna about 2002 from a QST article written by Phil Salas, AD5X. It is a center-loaded vertical tuned by moving an alligator clip to different coil taps and works 40 meters and up. I followed his plans faithfully except I added a matching coil at the base to improve the SWR. Without the coil the best SWR I could obtain on 40 meters was 1.5:1, a value that caused the IC-706 to reduce output power. With the matching coil, tapped up from ground, I can get 1.2:1 or better allowing the IC-706 to put out full power.

Phil Salas, AD5X is the author of the article which was published in the July 2002 issue of QST.



The carrying case made from 4" PVC pipe. The antenna is fairly fragile and this protects it nicely.



Components of the antenna: The 3 gray pieces of pipe are 20" sprinkler risers with solid #14 wire wound on the outside (2 turns per section). The white piece is the base section. To its left is the telescoping antenna stinger, the loading coil, and the base matching coil. The radials are in the nylon bag.



Base section showing the radials, coax feed, and matching coil. The matching coil tap, with the alligator clip, is a last minute kluge. The one I made for the kit was not in the case for some reason. It had a ring terminal on one end (to fit on the black terminal with the radials) and an alligator clip on the other end. I'll have to make another when I get home. I know I should have opened the case and checked if all pieces were present but nah, I just knew it was all there NOT



Assembled antenna focusing on the base and radials



It all fits neatly into a briefcase and carrying tube



The Membership Roster of the Moonshine Net is comprised of all licensed amateur radio operators who have checked in to the net at least once. 10-10 International Members are indicated by their red membership numbers. Membership certificates are issued to those who have checked in 10 times or more as evidenced by a log submitted to Certificate Manager W4DNN@arrl.net. If your call is missing from this listing or is incorrect, please e-mail with corrections or notify net manager.

WO	AC	BOB	71507	
KC5	AS	Keith		
WA1	ATF	JOHN		
WA4	BYK	JOE		
K4	BZZ	BUZZ		
KC3	CH	RANDY	41091	MOONSHINE NET MGR randysradios@hotmail.com
WB6	CMX	DON		
K7	CXW	GAY		NET CONTROL
K4	DES	DAVE		
W4	DNN	DENNIS	74547	10-10 CHAPTER HEAD/CERTIFICATE MGR./EDITOR
KF4	EEG	WILMA		w4dnn@arrl.net
KB0	EVM	DAVE	62302	
N4	FA	MARTY		
W4	FAA	MATT		NET CONTROL
W4	FFP	RUSTY		
KI4	FJT	BOB		
KB2	FSL	PAT	58145	
WB4	GDX	MIGUEL		NET CONTROL
WB4	HDW	ROGER	72694	
WA1	HEF	JOHN		
KB1	HIP	ANDY		
W9	HLA	JOE		
KI4	HOK	TED		
W8	HTD	MAC	45475	
NX2	II	JIM		
N2	JDK	HOYT		
N3	JKP	RON		
W1	JRC	DICK		
W1	JRZ	DICK		
W4	JS	JACK		
WB3	KAW	JIM	30588	
KG9	KB	Dean		
KG9	KB	DEAN		
N1	KKE	JIM	65473	
KG4	KQW	KEN		
WB8	LSV	BARRY	30421	NET CONTROL
KD4	MFV	PETE		
K04	MG	KEN		
W4	MPJ	BOB		
K9	MZN	CHUCK		
W4	NFL	KEITH		
KG4	NKO	DON		
KI4	NQM	ROGER		
KI4	NQM	ROGER		
KC4	NUX	ALDO		NET CONTROL

N8	NZ	FRED	
W2	OG	JOHN	5904
W0	OQ	JIM	
KB8	ORD	CHARLEY	
KG4	ORS	RED	(Silent Key 8/07)
KE4	PIF	JOY	
AB5	PL	RICHARD	
AB5	PL	RICHARD	
KI4	QDW	OLIVER	
W4	RPG	BOB	NET CONTRTOL
W0	RQO	LEON	8647
KI4	RUS	Steve	
AA4	RV	JIM	45345
N8	RZZ	MATT	
KI4	SDF	BOB	74596 NET CONTROL
KI4	SSD	JOE	
KS4	ST	REINHOLD	66947
KI4	STD	RAY	
K4	TDB	MARTIN	NET CONTROL
KI5	TG	LEN	
KI5	TG	LEN	
KE4	TJO	GENO	74641
KF4	TZP	ZACK	
KI4	UAY	BOB	
W4	UGQ	JOHN	29096 NET CONTROL
WB4	UKL	STEVE	
KD4	USA	DWIGHT	
WJ1	V	TONY	
KC4	VGN	FRANK	
K4	VHX	VIC	
N8	WXD	KEN	
N4	XJQ	TOM	
N9	ZET	FRED	
N4	ZNU	JIM	NET CONTROL
K3	ZXL	DAN	
W8	ZXP	John	3399

Matt, N8RZZ: Our Webmaster

It's under construction. It's coming soon. Its our new Moonshiner Web Site. Matt Ragen, N8RZZ is hard at work as our new web site moves toward reality.

The site will feature all the back issues of The Moonshiner, available for download as .pdf files.

We also have a new e-mail address for communications to The Moonshiner and the Moonshine Chapter of 10-10 International.

To be added to the e-mail subscription list, submit photos, articles or ads, you can send them to this address:

swfl1010@yahoo.com

Thanks Matt, for all your hard work. We look forward to a super web site.

WOW, It Has A "FIX" Button

I turned on the FT-707 a few minutes before the net. To my horror, the LED display just flickered at 91MHz which is impossible. No audio, just a slight hiss. I turned it on and off a few time. Nothing. I checked and reset all the knobs and switches. Nothing. What's going on here??

But then, I noticed a little button that was labeled "FIX". What was this?? I pressed it and everything was fixed! Actually it is a fixed frequency Xtal controlled channel switch which I must have pressed by accident earlier.

W4DNN

The FIX Button



A Blast From The Past: 2-Meters 1972 Style

IN
CASE
YOU'VE
FORGOTTEN...

There still is a 2 Meter AM Band . . .
and the only way to go 2 Meter AM
is with the improved CLEGG 22er MKIII

- Improved VFO Design
- Improved Receiver Sensitivity
- Improved Transmitter Design
- Improved Mobile P/S Reliability
- Improved Image & Spurious Rejection



22er MKIII

Recently redesigned—electrically and mechanically—the 22er MKIII provides the highest power and most sensitive receiver ever offered in a 2 Meter AM Transceiver. It is equally at home with 115 VAC or 12 VDC power source. The self contained VFO provides instantaneous rock stable QSY.

If AM is your thing—if you are looking for the good old informal 2 meter rag-chew—if your C-D gear needs updating—if you like contests—THE 22'er MKIII at only \$389.95 complete with microphone is for you. See your local Clegg dealer now.



Clegg DIVISION

Box 388, R.D. #3
Litz, Pennsylvania 17543
Tel: (717) 626-8566

SECTION 1 - MEMBERSHIP APPLICATION AND CONTACT LOG

NOTE: If this membership application is being used for renewal purposes, please enter your 10-10 number here _____

Please print your Name _____ Call _____

Address _____ Year of Birth _____

City _____ State or Country _____

Postal/Zip Code _____ E-mail Address _____

NOTE: 10-10 NUMBER, CALL, NAME, ADDRESS, MEMBERSHIP STATUS AND E-MAIL ADDRESS IS MADE AVAILABLE TO ALL MEMBERS VIA A MEMBERSHIP ROSTER. ALL OTHER INFORMATION IS KEPT CONFIDENTIAL AND NOT DISCLOSED EXCEPT BY THE ORDER OF A LAWFUL COURT.

I certify that I meet the membership requirements of 10-10 _____*

* as listed on Page 2 of this publication.

YOUR SIGNATURE

10-10 NUMBER	CALL SIGN	OPERATOR'S NAME	DATE OF CONTACT	QTH (State, Province or DX Country)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

SECTION 2 - FEE SCHEDULE AND PAYMENT INFORMATION

10-10 FEE SCHEDULE (as of 2/1/03)	US Zip Codes	DX
New Members	<input type="checkbox"/> \$ 15	<input type="checkbox"/> \$ 18
Renewals (yearly)	<input type="checkbox"/> \$ 15	<input type="checkbox"/> \$ 18
Renewals - 3 year incentive	<input type="checkbox"/> \$ 40	<input type="checkbox"/> \$ 49
Family Membership (yearly)	<input type="checkbox"/> \$ 5	<input type="checkbox"/> \$ 5
Life Membership	<input type="checkbox"/> \$ 500	<input type="checkbox"/> \$ 650
Senior Life	<input type="checkbox"/> \$ 150	<input type="checkbox"/> \$ 200
Scholarship Foundation Donation	<input type="checkbox"/> \$ _____	<input type="checkbox"/> \$ _____
<i>Enter Total</i>		

US Postal Codes and LIFE Memberships mail to
Data Manager, Ten-Ten International Net, Inc.
PMB142
643 N. 98th Street
Omaha, NE 68114-2342 USA
 for information email: wa6poz@arrl.net

DX Applicants mail to:
Carol Hugentober, WA8YL #29588
DX Area Manager
4441 Andreas Avenue
Cincinnati, OH 45211-2622 USA
 for information email: wa8yl@juno.com

METHOD OF PAYMENT

CHECK Make all checks payable to 10-10 International Net, Inc. Please list your call and 10-10# on your check. Do not send cash. All DX are reminded that money amounts are quoted in US Dollars.

DX Members please pay by International Postal Money Orders (IMOs are acceptable)

MASTERCARD Account Number: (Please include all the numbers on your credit card)

VISA □□□□ □□□□ □□□□ □□□□

Good Through: □□/□□

Name of Cardholder _____ PHONE (required): _____

SIGNATURE of Cardholder _____ Date: _____

For charges this form may be faxed to 10-10 International Net, Inc. at 402-393-6117