

Central Michigan Amateur Radio Club Lansing Civil Defense Repeater Association P O BOX 27321 LANSING MI 48909

# The Scope



June 2004

## **Local SKYWARN Procedures and Information**

INSID	E THIS	SISS	UE:

CMARC/LCDRA Board	2
Letter from the Editor	2
Presidents' Corner	3
Ziegenbien Winner	3
Upcoming Events	4
For Sale	4
Local Nets	4
Treasurer's Report—May	5
Birthdays/Anniversaries	6
Thank You!	7
Treasurer's Report-April	7
\$9 PL Tone Encoder	8

#### **Hamfests for June**

June 19 Midland ARC Midland, MI http://www.qsl.net/w8kea/

Contact: William French, AB8JF

940 West Stewart Road Midland, MI 48640-9167 Phone: 989-835-5562 Fax: 989-835-3205 Email: ab8jf@arrl.net

June 20

Monroe Co Radio Communicatio ns Assn.

Monroe, MI

http://mcrca.org/hamfest.htm

Contact: Fred VanDaele, KA8EBI

4 Carl Drive Monroe, MI 48162

Phone: 734-242-9487 (after 5 PM)

Email: ka8ebi@arrl.net

With the rash of bad weather recently, this would be a good time to review SKYWARN procedures that have been established to help maintain a quality and efficient net that will best serve the National Weather Service, other agencies, and our local communities. Spotters are encouraged to follow the following net operating guidelines:

- Direct all traffic to the Net Control Operator. The Net Control Operator directs the Net's activities, coordinates spotters, forwards reports, and announces National Weather Service statements.
- 2) Be aware of the situation. Always listen to the reports of other spotters. If what you are experiencing is of less priority than what is occurring in another area, then please yield the frequency to the spotters with the most urgent reports.
- 3) Keep transmissions as brief as possible. This keeps the frequency open for others to use. As always, reports with the most priority should have the most use of the frequency.
- 4) Do Not report general phenomenon that is always associated with thunderstorms, such as rainfall, lightning, thunder, etc. Such reports are unnecessary and take up time on the air, possibly preventing more important reports from being passed.
- 5) Only report severe weather related observations that are described in training and supplemental materials. These reports are essential to the National Weather Ser-

vice during severe weather events.

- 6) Be as accurate as possible. Use proper measurements such as 1/4 inch or pea size, 3/4 inch or dime size, one inch or size of a quarter, golf ball size, etc. When estimating wind speeds, use the following tips from the National Weather Service's Spotter's Guide:
  - a) 25-31 mph: Large branches in motion; whistling heard in telephone wires
  - b) 32-38 mph: Whole trees in motion; inconvenience felt walking against wind
  - 39-54 mph: Twigs break off trees; wind generally impedes progress
  - d) 55-72 mph: Damage to chimneys and TV antenna; pushes over shallow rooted trees
  - e) 73-112 mph: Peels surface off roofs; windows broken; light trailer houses pushed or overturned; moving automobiles pushed off roads
- 7) Be sure to check out if away from your radio. This is important as Net Control counts on you being where you say you are. If something is happening in your area and you have not checked out, Net Control has no idea if something may have happened to you due to the weather.

#### ADDITIONAL TIPS

The first sign of a tornado may not be a funnel at the cloud base. Your first clue may be debris or dust at the surface, so (cont'd on page 5) Page 2 The Scope

# CMARC BOARD MEMBER CONTACT INFORMATION

Dennis "Rocky" Beckner	WD8SBO		wd8sbo@att.net	President
John Hosford	KC8QZB	(517) 626-6594	jhosford@netzero.net	Vice President
Dick McGuire	KI8C	(517) 782-1430	dickki8c@juno.com	Secretary
Randy Stortz	K8VY	(517) 393-0634	rstortz386@msn.com	Treasurer
Jane Law	KC8FSK	(517) 974-5671	janelaw@sbcglobal.net	Director
Gregg Mulder	WB8LZG	(517) 646-6257	,	Director
Kevin Mulder	KC8QZE	(517) 646-6257		Under 22 Director
John Ingraham	NG8L	(517) 484-8027	ng8l@arrl.net	Membership Chair
Donald DeFeyter	KC8CY		_	Field Checker
Ken Kruger	XAA8W			Field Checker

# LCDRA BOARD MEMBER CONTACT INFORMATION

Dan Harger	W8BCI	(517) 882-8784	w8bci@juno.com	311
"Bruce" Rainey	KC8ODP	(517) 627-9118	kc8odp@arrl.net	
Don Rickerd	W8BQD	(517) 339-8496		
Dennis Boone	KB8ZQZ	(517) 337-0857	drb@msu.edu	
Troy Creed	W8TCC	(517) 323-6358	w8tcc@arrl.net	
Hal Bell	W8LAY	(517) 484-0962		
Scott Newfer	W8SRN	(517) 373-0786		



Letter from the Editor:

My first words this month come in the form of a huge apology to one of our long time members, Currin Skutt, W8FSZ. Mr. Skutt

sent me an email awhile back with some items he had for sale that were to be put in the SCOPE . Unfortunately, due to technical difficulties, the message (along with others) has disappeared. Mr. Skutt, I deeply regret that your items did not make it into the SCOPE and hope you will forgive my error and if you will resend me the items, I guarantee you they will be in the next issue of the SCOPE following receipt of your email.

As most of you know, I have been doing the SCOPE for the last year and a half. Up until recently, I have found great pleasure in doing so. I say recently because lately it seems that instead of being a <u>club</u> newsletter, it has become a 'well, let's see what I can throw in there this month; newsletter. As you can see, there isn't much to this month's edition.

When I agreed to take this project on, it was with the understanding that I would get a lot of articles from members of the club, especially since I knew virtually nothing about ham radio (and still don't know much more than I did then).

Unfortunately, out of our total membership, I have only been able to rely on a handful of people to help fill this newsletter. This is YOUR newsletter. I don't know what

you want to see or read about each month. It needs YOUR input.

A good example would be Hamvention, which by the way, for someone who has never been before, it was a pretty overwhelming experience!!! But, to make my point, I ran across four members there, heard about two or three others that were there, yet noone has sent anything in to the SCOPE about what they did or saw!

I can tell you from my experience that it was quite an experience. Who knew there could be so much ham equipment and accessories under one roof! I was amazed and awed at the amount of people who came through that building each day. And it was good to see there are some younger people out there who seem to be getting into being amateurs as well.

Doug and I did miss out on the dinner on Friday due to lack of directions but it didn't detract from the experience. As avid campers, we found a really nice campground south of Dayton. The people who owned it were very helpful when we got there and realized we had a busted water hose. They got us to the right people and we had it fixed in no time.

I highly recommend to anyone who has never been to the Dayton Hamvention to make plans to attend next year. It's worth the experience!!!

Your editor, Evelyn Sitterson, KC8YMN Page 3 The Scope

# Presidents' Corner

We have had an active spring so far. The Dayton Hamvention is over for another year, with many change from past years. Many for the better with much work to do. Ladies Night is also past and this was a fabulous event. I thank everyone on the Zeigenbein Awards Committee, and especially Pam Denomme and all the Ladies that helped make the evening so very special.

We now need to work on Field Day and HamFair. The June meeting will cover antennas. If you have any antenna projects that you are interested in, share it with the rest of us. We can possibly use some of these on Field Day. Field Day is to see if we can setup in a location and operate for 24 hours. We need to check different operating configurations and see which ones work the best. We shall follow the ARRL's rule and only have one station each of voice and cw (digital) per band. The operating stations will be defined by the Field Day Committee.

HamFair is coming along slowly. I have distributed nearly 2500 flyers at Marshall and Dayton. We need to have a presence at as many hamfests as possible between now and October. This is a make or break year for HamFair, and the trend is for smaller and smaller crowds and many hamfests are gone. If we are to survive we must have something to offer. I would like to see some forums at our HamFair, and would like everyone's input.

I am looking forward to seeing everyone at the June 4<sup>th</sup> meeting. So everyone have a safe holiday weekend. If you are traveling, drive safely and come back alive.

73's Rocky K8DRB

# 2003 Ziegenbien Award Winner



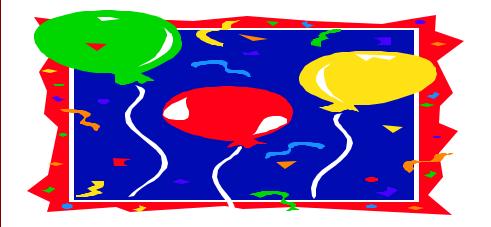
The recipient of the 2003 Ziegenbien Award went to a very deserving person in our club. Gregg Mulder received the Ziegenbien Award at this year's annual Ladies' Night Banquet on May 7, 2004.

Each year, CMARC honors one of their own to receive the Ziegenbien Award, named for "Mr. Radio" himself, *Ralph Ziegenbien*. The recognition

takes the form of a plaque which is presented at the annual Ladies' Night Banquet held each spring.

The Ziegenbien Committee, which consists of the previous three year winners, select the nominee to receive the award. Gregg joins an incredible list of people

2003	Gregg Mulder	WB8LZG	1981	Harold Mahlke	W8OG
2002	Mark Humphreys	N8DEF	1980	Beverly Stoner	K8ZJU
2001	Jaymes Kenyon	KC8DJH	1979	Lee Hamilton	K8CDM
2000	J. Ervin Bates	W8ERV	1978	Dale Moore	K8YRD
1999	Pam Denomme	KB8PSF	1977	Larry Alman	WA8QCW
1998	Julie McLain	KB8ZXR	1976	Lloyd Brox	K8ZKM
1997	Roy Uchigashima	N8GAO	1975	George Croze	K8VKX
1996	Pete Elrod	N8EST	1974	Carl Hunsaker	K8ILF
1995	Don Cote	KD8BD	1973	Lyle Brooks	W8TIJ
1994	Dick Pennington	W8SFA	1972	John Sheldon	WA8MVH
1993	Dick Thomas	W8VJC	1971	Mert Henry	K8ETU
1992	Ken Kruger	W8AAX	1970	Wally Beck	W8QQL
1991	Bill Chapman	W8TJQ	1969	Harold Bell	WA8LAY
1990	Don Devendorf	W8EGI	1968	Duane Cross	K9ATU
1989	Inez Pearson	Ky8V	1967	Dick Kelly	K8BZV
1988	George Wood	K8GHX	1966	Ben Hassell	W8VPC
1987	Don Tillitson	WB8NUS	1965	Dan Harger	W8BCI
1986	Marion Stoner	W8VWY	1964	Don Rickerd	W8BQD
1985	John Hewitt	K8DHN	1963	Pete Gossett	W8CKK
1984	Rowena Elrod	KA8OBS	1962	Currin Skutt	W8FSZ
1983	Linda Haigh	KA8HHA	1961	Gorden Main	W8OCK
1982	Jere Haigh	WA8BAP			



#### **LCC Clean Out**

Lansing Community College is cleaning out lots of electronic gear from their labs. Now may be a good time to pick up some great bargains on some very nice test equipment such as:

Heath frequency counters \$10 Heath Cantenna dummy loads \$10 Heatg AC voltmeters \$10 B&K Oscopes \$30

Plus a wide variety of other useful test equipment for the shack, all at very reasonable prices. I Items are available at the LCC Administration Building on Grand Avenue on the 1st and 3rd Fridays of each month. Now is the time to outfit your test bench cheap!

73s Gregg Mulder, WB8LZG

Merton Thurston, KB8MUM, sends the following message:

It is with a sad heart to tell you that my beautiful wife, Elaine, passed on on September 10, 2003.

For those of you that know Merton or Elaine and would like to drop him a card or letter, here is his address:

Merton Thurston, KB8MUM 9934 Pineaire Drive Sun City, AZ 85351-1258

# **Local Nets**

ARES/RACES Mondays (except 3rd Monday)

8:30 pm

146.58 simplex

DTACS Tuesdays

7:00 pm 146.94

# Upcoming Events Requiring Amateur Participation

July 10-11, 2004 MS 150 Bike-a-thon

July 24, 2004 Women on Wheels

Sept. 12, 2004 Run with MSU Girls

Hawk Island Park

Sept. 25, 2004 Hospice Walk

Riverfront Park

For Sale!
esktop PC, XP Home, AMD A

Desktop PC, XP Home, AMD Athalon XP 2100+(1.73 GHz) CPU, Igb mem, 17 in. monitor (cable a bit touchy about color but ok), CD-RW drive, floppy, 250 Mb Zip Drive, 20 Gb & 60 Gb Hard Drives, 2 serial/1 par/6 USB/1 game/Lan/modem ports, sound card & speakers. \$425 or best offer

30 Gb External USB 1.1 hard drive—\$50.00

7 port powered USB 1.1 Hub—\$20.00

Memory modules (PC100 & PC133):

4-128 Mb SDR DIMMS, \$25.00/ea

3-64 Mb DIMMS, \$15.00/ea

4-16 Mb EDO SIMMS, \$5.00/ea

Toshiba Tecra 500 CDT laptop, 32 Mb mem, 1 Gb HD, 100 MHz Pentium, Win98SE, 1 serial/1par port, 10 Mbps LAN card. Not a gamer, but good for logging, rig control, digital modes, etc. AC only as battery is shot, not worth replacing. Reset button NG. \$25.00

Call Bernie Gaffney, N8PVZ, 517-393-4028 Grid Square EN72rq (Lansing)

## CENTRAL MICHIGAN AMATEUR RADIO CLUB TREASURER'S REPORT

May 26, 2004

Account Balances As of May 26, 2004	
ASSETS: Cash & Bank Accounts Mich. Nat'l Bank Checking Mark & Marilyn Humphreys' Fund TOTAL Cash & Bank Accounts	\$ 1,139.04 \$ 316.00 \$ 1,455.04
Other Assets: Comerica Bank \$1,000.00 CD Interest due CMARC Total worth to date Act. Rec. Scope Prnt/Send-LCDRA Act. Rec. Sci-Fair Tables LCDRA TOTAL OTHER ASSETS:	\$ 1,532.98 \$ 1.42 \$ 1,534.40 \$ 122.37 \$ 22.50 \$ 1,679.27
LIABILITIES:	\$ 0.00
TOTAL NET WORTH:	\$ 3,134.31
Income & Expenses April 26, 2004 to May 26, 2004	
INCOME: Dues Directory sales: Ladies Night Reservations Permit Closure INCOME:	\$ 20.00 \$ 0.00 \$ 464.00 \$ 70.32 \$ 554.32
EXPENSES: Scope Cost for Print. & Mail. Service Charge for March (Banking) Ziegenbein Award Ladies Night/Coral Gables Ladies Night Flowers & Cake Ladies Night Entertainment /J. Kelly	\$ 82.05 \$ 10.00 \$ 52.95 \$ 546.31 \$ 78.77 \$ 125.00
TOTAL EXPENSES:	\$ 895.08
TOTAL NET PROFIT/LOSS	\$ 340.76
Respectfully Submitted by:	

Randall Stortz, K8VY

Treasurer, CMARC

# SKYWARN Procedures and Information

(cont'd from page 1)

be alert to events at ground level, as well as in the clouds.

- At night, lightning flashes can aid in identifying the Rain Free Base, Wall Cloud, and Precipitation Area. Although a loud roar is frequently associated with a tornado, strong straight-line winds can also produce such a sound.
- If you spot from a fixed location, use a map to determine distances and directions to known landmarks such as water towers, TV towers, etc. This will help you estimate distance and direction in your reports. Mobile spotters should always have up-to-date maps and be familiar with the area in which they are operating.
- When available, use binoculars to look for rotation and other cloud features. Once you spot a funnel, tornado, or wall cloud, be alert for the formation of others in the area.
- If you find yourself in large hail, remember you are in or near the area where tornado formation is most likely in a tornadic thunderstorm.
- Always follow the basic safety rules. In open country, a spotter may be able to use his knowledge of the tornado's motion and available escape routes to drive away from the tornado safely. In urban areas this is usually not possible because of traffic congestion. Make certain your family knows what to do in tornado emergencies as you may not be available to assist or direct them.

When severe weather is occurring and a SKYWARN Net is in operation, please reserve the frequency for the use of TRAINED spotters (unless there is an outside emergency). This assures the accuracy of the reports. Trained spotters in the field provide a valuable service to the National Weather Service.

#### LOCAL SKYWARN NET FREQUENCIES

#### Primary

145.390 (-) MHz (100Hz tone input) repeater Secondary

146.700 (-) MHz repeater

#### Secondary Backup

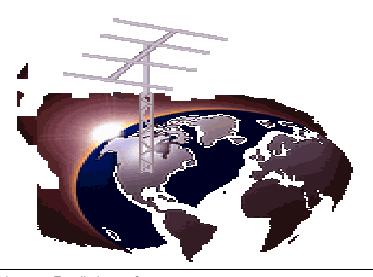
146.94 (-) MHz (100Hz tone input) repeater Simplex backup (if all repeaters fail) 146.580 MHz simplex

# June 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

### **Special Items of Interest**

\* Richard Cole is looking for a housekeeper. Contact him at the next CMARC meeting



#### June Schedule of Events

June 4 CMARC Meeting Red Cross Building

7:30 pm

June 5 .39ers meet at Nic's 3812 S MLK Blvd

8:00 am

June 7 DTACS Meeting

7:00 p.m., Delta Tnshp Fire Sta

June 9 OOTC (Old Old Timers Club), Flap Jack, 1601 N Waverly Rd

1:00 pm

June 12 .39ers meet at Nic's 3812 S MLK Blvd 8:00 am

June 19 .39ers meet at Nic's 3812 S MLK Blvd

8:00 am
June 21 Lansing ARES/RACES ICSD, Mason

7:00 pm
June 26 .39ers meet at Nic's
3812 S MLK Blvd
8:00 am

June 26 QWCA, Korner Kitchen Mt Hope & Pennsylvania 8:00 am

#### **June Birthdays**

June 7 Al Sevrey, KC8ODW

June 24 Keith Colister, K8CWQ

June 25 Gregg Mulder, WB8LZG

June 26 Roxana Hannahs, KC8GAK

June 27 Jordan Mulder, KC8QYU

#### **April Anniversaries**

June 9 John Kreer

June 14 Russell Fitzgerald

June 20 Benjamin Hassell

June 25 Keith Colister

Address or Email change?

Please make corrections on address label and mail to:

John Ingraham/NG8L, Membership Chairman 2807 Greenbriar Avenue Lansing, MI 48912

Or email changes to: NG8L@arrl.net

www.qsl.net/cmarc 80 Years of Service to Our Community! www.qsl.net/lcdra

# Thank You For Your Help!

#### MS Walk—April 18, 2004

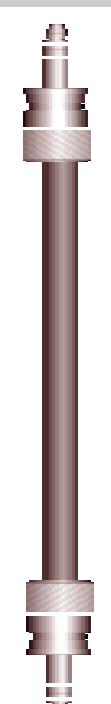
Roger Barnhill	AB8RX
Paul Carpenter, III	KB8YQW
Forrest Clark	N8PWD
Jessica Joslin	KC8VEL
Ron Harger	WD8BLS
John Hosford	KC8QZB
Jermie Severy	KC8EIA
Don Tillitson	WB8NUS
Roy Uchigashima	N8GAQ
William Wing	W2PMH

#### Walk America—April 24, 2004

Roger Barnhill	AB8RX
Dennis Boone	KB8ZQZ
Paul Carpenter, III	KB8YQW
Forrest Clark	N8PWD
William Cote	WD8NYW
Clint Hannahs	KC8EHR
Jessica Joslin	KC8VEL
Jermie Severy	KC8EIA
Don Tillitson	WB8NUS
William Wing	W2PMH
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#### Mason Parade for Masonic Lodge #70-May 8, 2004

Rodney Ball	KC8HGF
Roger Barnhill	AB8RX
Dennis Boone	KB8ZQZ
Paul Carpenter, III	KB8YQW
Clint Hannahs	KC8EHR
Don Tillitson	WB8NUS
William Wing	W2PMH



## CENTRAL MICHIGAN AMATEUR RADIO CLUB TREASURER'S REPORT

April 26, 2004

**Account Balances** As of April 26, 2004

ASSETS:	ASS	ŝΕ٦	ΓS:
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Cash & Bank Accounts	
Mich. Nat'l Bank Checking	\$ 1,499.80
Mark & Marilyn Humphreys' Fund	\$ 316.00
TOTAL Cash & Bank Accounts	\$ 1,815.80

#### Other Assets:

Comerica Bank \$1,000.00 CD	\$ 1,532.98
Interest due CMARC	\$ 1.42
CD Total worth to date	\$ 1,534.40
Act. Rec. Scope Prnt/Send-LCDRA	\$ 81.34
Act. Rec. Sci-Fair Tables LCDRA	\$ 22.50
TOTAL ASSETS:	\$ 1,638.24

#### LIABILITIES: \$0.00

#### TOTAL NET WORTH: \$3,454.04

Income & Expenses March 26, 2004 to April 26, 2004

#### INCOME:

Dues	\$ 10.00
Directory sales:	\$ 0.00
50/50 Drawing proceeds collected	\$ 15.00
Ladies Reservations	\$ 112.00
TOTAL INCOME:	\$ 137.00

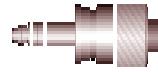
#### **EXPENSES**:

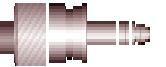
Scope Cost for Print. & Mail.	\$ 00.00
Service Charge for March (Banking)	\$ 10.00
TOTAL EXPENSES:	\$ 00.00

## Respectfully Submitted by:

TOTAL NET PROFIT/LOSS

Randall Stortz, K8VY Treasurer, CMARC





\$ 127.00

#### A \$9 PL TONE ENCODER

By Paul Towne, N1ZYB

With many of the 2-meter FM repeaters in the state going to the same PL tone (100.0 Hz), there may be some older transceivers that could be given a new life with the addition of an inexpensive PL tone generator. Figure-1 illustrates an easy circuit that can be constructed with mostly Radio Shack parts for less than \$10.

The heart of the circuit is the NE567 tone and frequency decoder chip that provides a highly stable precision oscillator. The output on pin 6 is an exponential triangle of 1 volt peak-to-peak. The only rigid requirement is that capacitor C1 be stable over a wide temperature range. Use only Mylar, polyester or metal film for capacitor C1. The frequency is determined by the following formula:

#### F=1/R1C1

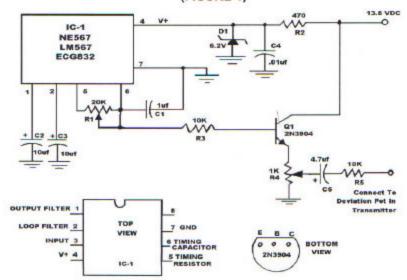
The specified values should allow any tone between 50 to 300 Hz.

The NE567 (ECG832) is available from JDR Micro Devices (1-800-538-5000) or Ocean State Electronics (1-800-866-6626).

The output of this PL tone generator should be connected to the deviation potentiometer in the transmitter circuit and not the microphone input. (Check schematic diagram of transceiver.)

To align the frequency of the tone generator, use another transceiver with CTCSS decode capability for the desired PL tone frequency. Attach a dummy load to the transmitter and key down the transmitter while turning potentiometer R1 slowly. As soon as the correct PL frequency is obtained, the squelch will open on the transceiver with CTCSS decode. Now adjust R4 for a tone level just high enough for the other receiver to decode the tone and not loud enough for others to hear it. R5 is used to prevent the tone generator from reducing the transmitter audio. Use a value in the range of 1K to 10K depending on what yields the best results.

(FIGURE-1)



#### PARTS LIST

- R1 20K 15 turn trimmer pot (RSU 10524205)
- R2 470 ohm 1/4 watt
- R3 10K ohm 1/4 watt
- R4 1K ohm trimmer pot (271-280)
- R5 10K ohm 1/4 watt
- C1 1uF Mylar, polyester or metal film capacitor (272-1055)
- C2, C3 10uF electrolytic capacitor (272-1025)
- C4 .01uF ceramic capacitor (272-131)
- C5 4.7uF electrolytic capacitor (272-1024)
- D1 1N4735 6.2 volt zener diode (276-561)
- Q1 2N3904 transistor (276-2016)
- BD General purpose IC PC board (276-159B)
- IC-1 LM567 (RSU 11391968)

#### Remember America's Heroes



Central Michigan Amateur Radio Club Lansing Civil Defense Repeater Association P O BOX 27321 LANSING MI 48909





CMARC—	Associate membership: \$5 per year.		
Please make check or money order payable to CMARC and mail to: John Ingraham/NG8L, Membership Chairman, 2807 Greenbriar Avenue, Lansing MI 48912.			
Name:			Call:
Address:			
City:		_ State	Zip
Phone: ( )	·	Licens	se Class:
, <del>_</del>	ber?□Yes PE?□Yes		
Email Addre	ss:		
Birthday: _		_	
Wedding An	niversary:		
As a licensed Amateur, you can sign up today as a FULL member of CMARC. You will have voting rights as well as an annual subscription to the SCOPE. As an ASSOCIATE, you have an annual subscription to the SCOPE, but no voting rights.			

LCDRA— Membership: \$15 per year (January to January) Additional family members: \$7.50 per person				
Send check or money order payable to: L.C.D.R.A., PO Box 80106, Lansing MI 48908				
Name:		Call:		
Address:				
City:			_ State _	Zip
Phone: (	)	) License Class:		
ARRL Member? □ Yes □ No Email SCOPE? □ Yes □ No				
Email Address:				
Birthday:			Anniver	sary:
Use of the repeater does not REQUIRE membership, but your support is GREATLY appreciated.				
HAMFEST 2003				
		Swap/T Table	runk Sales	\$4.00 \$8.00
	Send payment along with this form to the address above.			