

# The Feedline

June 1999

Vol. 20, No. 6

# Calendar of Club Events

#### **MEETINGS**

Club meetings are usually at the Red Cross building, 4860 Sheboygan Avenue, Madison. Regular meetings start with business matters at 7:30 pm, followed by the program unless otherwise noted. Programs are subject to change. Updates are posted on the FLARC2 packet station at 147.555 (1200/9600 Baud) and 446.100 (1200/9600 Baud).

#### MEETING DATES AND PROGRAMS

***************************************	S STILES THOURAINE
6/1	Field Day preparations
6/15	Field Day site visit: Blackhawk Ski Hill
7/6	No meeting
7/20	HDTV by Ken Dixon, W9XM
8/3	No meeting
8/17	Fox Hunt with Don Michalski, W9IXG,
	Jim Lattis, KB9REO, and Tony Lattis
9/7	Traffic Handling: Denny Rybicke, K9LGU
9/21	Suggestions?
10/5	Suggestions?
10/19	Antenna Modeling: Scott Ellington, K9MA
11/2	Steve Dahlgren, WB0YJH, of the
	Madison Fire Department

#### **BUCK NIGHT WINNERS**

The winner on May 4 was Jackie Jeardeau, KB9LYM. The winner on May 18 was (again!) Frank Holliday, WB9NOV. (Rumor has it that Frank is no longer eligible for the drawing).

#### FLARC NETS

Sunday morning on 28.350 MHz at 9:30 Am. Warm up on 3.985 between 9-9:30 Am.

#### SATURDAY MORNING "ZILCH" LOCATIONS

The eastside Zilch (ham breakfast) is at 8:00 AM at *Continued on p. 2.* 

#### PREZ SEZ

Hello, Everyone!

Thanks to Roy Pedersen, K9FHI, for his years of service as Wisconsin's ARRL Section Manager. Thanks also to Don Michalski, W9IXG, for his willingness to fill out the balance of Roy's term. I'm sure Don's varied experiences and knowledge will serve us well.

June 26 and 27 are fast approaching. Talk with Ted Gisske, K9IMM, and John Wacker, N9YJV, about your Field Day interests. They need to know what band and mode you are interested in working, and they also need people to help with set-up. John's significant other has volunteered to head up the KP Crew.

Please lend a hand (and a dish to pass) so that our dining experience will be truly enjoyable! We'll discuss this more at our upcoming site visit to Blackhawk Ski Hill west of Middleton. Marylynn Franzen, K9SAM, will be signing people up for the Saturday night dining extravaganza over the next few weeks. She would really appreciate getting your reservation and money before Field Day if at all possible. For \$10 you get both Saturday potluck supper with your choice of grilled steak or ribs, plus Sunday breakfast. Don't forget: Overnight camping is allowed both Friday and Saturday (no hookups), and well-behaved dogs are welcome to join in the fun. FLARC tries to afford our members a variety of operating opportunities, including tried-and-true HF phone, CW, and VHF. This is a fine chance for new hams to get on the air with lots of help available. See you at the upcoming site visit!

73 de **Dave**, N9DMS

the Green Lantern in McFarland and 8:30 AM at the Avenue Bar on East Washington Avenue in Madison. The westside Zilch is at 10:30 AM at Fitzgerald's on the Beltline in Middleton. Come join us!

#### MADISON AREA INFO NET

Thursday evenings on 147.15 at 8 PM. Backup frequency is 146.76. Traffic/check-ins are welcome.

#### MADISON WEB PAGE

Visit this address: http://members.aol.com/staskc2ak and link to the new site. Check the links for new goodies!

#### **UPGRADES**

Bud Morin, K9ENC, upgraded from General all the way to Extra and is enjoying enhanced DXing.

#### PACKET NEWS

The N9KAN BBS was struck by lightning and will be down indefinitely. (Jim's web site URL is www.whrc-wi.org)

These club members are celebrating birthdays:



•	-		•
<b>KG9NG</b> Sam Rowe		6/4	
KC2AK	Stas' Wnukowski	6/8	
WD9BFV	Richard Lindgren	6/12	
W9JEK	Wilbur Jensen	6/14	
N9MW	Ed Toal	6/21	
K9XZ	Jake Kitzinger	6/28	
K9IMM	Ted Gisske	7/1	
K9YXW	John Schroeder	7/2	
WA2DEU	Bruce Micales	7/5	
N9OJN	Floyd Creamer	7/6	
KS9C	Keith Hester	7/6	
KC9RH	Dan Tracy	7/8	
KB9KVA	Yola Graniero	7/9	
KF9ZB	Mary Jones	7/11	
N9UBY	Steve Kahl	7/16	
N9HFR	Dan Egan	7/22	
N9DMS	Dave Schaefer	7/24	
N9XVZ	Karl Wigdal	7/27	
KB9NRV	George Young	8/6	
W9ORS	John Wolozyn	8/8	

#### DOPPLER RADAR

You can now have live doppler radar from Madison Channel 15 TV WMTV at the following url: http://207.0.85.164/radar.jpg
Click on Refresh or Reload to update display.
(Courtesty of Mack Brophy, N9NTB)

# THE TEN MOST COMMON TOWER-BUILDING MISTAKES

by Steve Morris, K7LXC, Champion Radio Products (with thanks to Jim Hugo, KE9ET, for submitting this)

After working on over 100 amateur radio tower and antenna systems over the last 15 years, I have seen many problems and failures that could have—and should have—been avoided. By not making these mistakes, you can make your tower and antenna system safer and more reliable. It'll even let you sleep nights better.

#### 1. Ignoring the manufacturer's specifications

Commercially-manufactured towers have to comply with current standards for wind loading and structural integrity. Licensed Professional Engineers design the towers and make the calculations to make them safe. If you don't follow their specifications at a minimum, the tower will not take the stresses and loads that it is subject to. In other words, it'll probably fail.

#### 2. Overloading

This is the most common reason for amateur tower failure. The first thing you need to know to plan and build a tower and antenna system is the wind speed rating for your county. Next you need the manufacturer's specifications for that wind speed. Then you must not exceed the wind load rating based on those factors, especially for crankup towers.

#### 3. Underestimating wind forces

Wind pressure on a tower and antenna system can be tremendous. Unless you've been up on a tower during a windstorm to feel the pressure and the forces, it's difficult to appreciate how significant they are. Increases in wind pressure are not linear—they are geometric.

# 4. Not building to the wind speed rating for the county

Although many counties in the United States are rated for only 70 MPH winds, many other counties have ratings much higher, up to 115 MPH. Find out what the wind speed rating is for your county or your specific location, and use that as the minimum design parameter for your tower and antenna system.

Continued on p. 3.

Continued from Tower-Building Mistakes, p. 2.

#### 5. Using the wrong mast for the job

Medium- to large-sized HF beams can put huge stresses on your mast. Know the difference between pipe and tubing as well as the pressure that your antenna system will put on the mast (tubing is generally acceptable; pipe is not). Then you can ensure that your mast will not bend or break in a big windstorm.

# 6. Not having the guy wires tensioned properly

Proper guy wire tension is a critical part of a tower's ability to handle wind stresses. Having the wrong tension can be like driving your car with over- or underinflated tires; it is potentially dangerous and is not the proper specification from the manufacturer. Find out the proper tension for your installation and tension them correctly.

## 7. Not having a proper ground system

A good ground system is necessary for both lightning protection and also for minimizing RFI to adjacent electronic devices.

# 8. Not doing an annual inspection

Your tower and antenna system are in a constant state of deterioration. Although it may be a slow process, it is going on continually. To find and fix small problems before they grow into big ones and potential calamities, do an annual inspection.

# 9. Not fitting the tower sections on the ground

Tower sections, new or used, may not fit easily together. It's much easier to correct alignment problems on the ground than up on the tower.

#### 10. Using the wrong hardware

Because tower and antenna materials are in a constant state of deterioration, you should use only hardware that minimizes corrosion. Galvanized or stainless steel materials are the only ones that will survive outdoor use reliably. Using the wrong hardware includes using nonclosed-eye eyebolts. Use only forged or welded eye-bolts since the wrong type can open up accidentally with disastrous results.

(Copyright Steve Morris. Permission is given to reprint this information if credit is given to "Steve Morris, K7LXC, Champion Radio Products.")

#### FCC SPIKES RESTRUCTURING RUMOR AT DAYTON

ARRL Bulletin 33, from ARRL Headquarters, Newington CT, May 19, 1999

Dayton Hamvention, Bill Cross, W3TN, of the FCC's Wireless Telecommunications Bureau spiked rumors that the FCC would have something substantive to say at Dayton about Amateur Radio restructuring, WT Docket 98-143. "I can confirm without reservation that the rumors that have been flying fast and furious as to what the commission has decided or will decide are just rumors," he said. According to

Cross, the commission had decided nothing as of May 13.

Cross said the FCC received 2250 comments from the amateur community in the proceeding. Comments have been read and filed, he said.

"I can confirm . . . that the rumors . . . are just rumors."

Cross offered his take on what the FCC might do, inferring that the commission would propose either three or four license classes, no more, no less.

Cross said many hams believe amateur examinations are not testing on the correct information. He invited hams to suggest questions to the Question Pool Committee, the body that comes up with the questions that appear on amateur exams. Suggested questions go to QPC Chair Ray Adams, W4CPA, 6702 Matterhorn Court, Knoxville TN 37918-6314. A copy to Bart Jahnke, W9JJ, ARRL VEC, 225 Main St., Newington, CT 06111, would be appreciated. Cross said comments on Morse code testing standards "drew the most passionate responses." The League has suggested 5 WPM and 12 WPM testing tiers. Cross said those expecting a new top speed above 20 WPM would be disappointed, but he offered no other predictions on how the commission might act on the CW requirements issue.

Cross also said the Universal Licensing System (ULS) will go into effect for amateur radio later this year and will incorporate the vanity call sign program. The system will replace the Form 610 series with a new, inclusive electronic document known as Form 605. ULS will permit amateurs to file applications, modifications, or renewals via the Internet if they choose, but no one will be required to file electronically. He encouraged hams *Continued on page 4*.

Continued from FCC, p. 3.

to register for the ULS. For more information, visit the FCC's amateur radio page, http://www.fcc.gov/wtb/amateur/

## STATEWIDE Y2K HAM COMMUNICATIONS TEST

by Mack Brophy, N9NTB

To test the ability of the Wisconsin Emergency Management hamshack in Madison to maintain communications to the 72 Wisconsin counties during Y2K and other emergencies, Dane County ARES/RACES hams will conduct a drill on June 26 during Field Day. The Badger Chapter of the Red Cross hamshack in Madison will also participate and take check-ins from other Wisconsin Red Cross hamshacks on HF and VHF packet The callsign on HF will be WA9ACI on 03.993.5 MHz LSB and on VHF packet W9JZ on 145.610 MHz. The drill will start at 7 PM and end at 9 PM CDT.

The WEM hamshack callsign is WC9AAG. Frameable WEM QSL certificates will sent to Wisconsin participants at no cost.

#### **Frequencies**

- HF phone: Primary 03.993.5 MHz LSB; Alternate: 07.277 MHz LSB
- HF pactor: 03.584 MHz USB
- VHF packet on the AR node frequency: 145.610 MHz
- VHF phone: CWRA Baraboo repeater 146.880 MHz
- MARA Madison repeater 147.150 MHz
- UHF phone: UHF backbone network and the Southern Wisconsin Repeater Group (443.400/443.675/53.090).

The WEM hamshack telephone number is (608) 242-3323. E-mail: races@dma.state.wi.us Mail QSL cards to: Wisconsin Emergency Management, Attn: Radio Room, Box 7865, Madison WI 53707-7865

#### WELCOME NEW SECTION MANAGER

by Richard Regent, K9GDF

Wisconsin's new section manager is Don Michalski, W9IXG. The section manager is the overall leader of ARRL field organization activities in our state, the focus for the ARRL's service to the public and to hams. A major duty is to recruit and appoint eight section-level leadership assistants and then to super-

vise the administration of programs such as emergency communications, message traffic, official observer, Amateur Auxiliary, affiliated clubs, public information, state government liaison, technical activities, and on-the-air bulletins. A section manager also visits clubs, hamfests, and conventions to give talks and answer questions.

(Due to space limitations, we are limited to only these excerpts from the press release. For the full text, contact Richard Regent.)

# As TIME GOES BY

by Carol Hoke, NS9L

1950 At the May 16 FLARC meeting, discussion centered on the ARRL while members re freshed themselves with beer, pop, potato chips, and pretzels.



- 1951 In July the club voted to replace any equipment that had been damaged at Field Day.
- 1952 At the April 1 meeting W9CBE presented a program on cw net operation and activities. On May 6 the club decided to set up a display of ham equipment at the upcoming civil defense show. In August the club came up with an idea for generating programs. Members were divided up into 4 groups (called North, East, South, and West groups), with each group—one at a time—being responsible for meeting programs.
- 1953 FLARC ran a contest for 6 months, and points were given to members for doing various activities. A steak dinner was given as a prize to each member of the winning group. The East group won and enjoyed their steaks at Leske's Supper Club. The annual report noted that "1953 was the year that TV hit Madison, and much work and emphasis was placed on TVI-proofing [members'] transmitters."
- 1954 In February the following possible activities for the year were suggested: "club operating contests, statewide picnic, ladies' night (3 a year), refreshments at frequent intervals." In November W9UFX announced the club dinner to be held in December at Kehl's Casino. Chicken served family style was to be the menu, and the cost was to be \$2.25 per person.

# FLARC Supported By MID-WEST ASSOCIATED

formerly Satterfield Electronics 6376 Copps Avenue Madison WI Industrial Electronic Parts

#### ARRL/VEC EXAMS

Exams are held in Madison on the second Saturday of the month. Location is the Madison Metropolitan Sewerage District Operations building at 1610 Moorland Rd. (the white building with the big tower). Exit the South Beltline Highway at South Towne Dr. Go south 3/4 mile and enter the gate to the right. Bring two forms of identification, one with a photo.

Exams start at 8:00 AM. sharp! Walk-ins welcome until 9:00 AM.

#### FLARC Nametags – \$7.50

New ham? New member? New call? Contact Marylynn, K9SAM to order your personal FLARC nametag! (608) 241-3391 Daytime

The Feedline is the monthly publication of the Four Lakes Amateur Radio Club (FLARC) and is published to inform members of club meetings and other events as well as local and worldwide news affecting amateur radio. Articles in the Feedline may be reprinted without permission, but please give the author and the source credit. Deadline The 20th of every month

Where to send it If you have an article you would like to publish in the *Feedline*, send it to:

Peg Haese KB9LIE 2637 Ninth Avenue Monroe WI 53566 (608) 325-6452

#### WANTED

- One or two sections of Rohn 25
- Several sections of Rohn 20
- Laptop computers with hard drives for contest logging Contact Peg, KB9LIE (608) 325-6452.

#### TOM'S AUTO CLINIC

2652 East Washington Avenue Madison WI (608) 241-3391

#### **CWRA SWAPNET**

## 146.88 Baraboo Repeater

10:00 A.M. Sunday mornings (unless there is a hamfest in the area) Queries and announcements are welcome.

Ham- and computer-related items only, please!

### **FLARC Supplies**

RG-213 is 42 cents a foot; teflon PL-259 connectors are \$1.25. Contact Peg, KB9LIE days (608) 266-2233.

# Madison Swapfest See You Next Spring!

Middleton Conference Center MARA InfoLine: (608) 245-8890 Sponsored by MARA/W9HSY

#### **FOR SALE**

- Yaesu FT-757GX HF rig. Digital readout, 10 memories, 160–10 meters. AM/FM/SSB/CW; built-in keyer. Radio has never been mobile and works great. Includes owner's and service manuals, hand mic, DC power cord, and original boxes. Also includes a Stone Mountain Engineering "QSYer," which is an external keypad that permits direct frequency entry on the 757. Asking \$550.
- JPS NIR-10 DSP noise reduction unit. This unit is in excellent physical and working condition. It connects between the audio output and external speaker of your HF rig. Works great to remove heterodynes and provide noise reduction on the received audio. Asking \$150.

For both the FT-757GX rig and JPS DSP unit, contact Mike Sonn, KF9AF, at (608) 221-3524.

#### **BUY — SELL — TRADE**

Attention, FLARC Members: To buy, sell, or trade amateur radio or computer items, you can list your ad in the *Feedline*. There is no charge for noncommercial advertising.



# **FLARC Membership**

Please start/renew my FLARC membership. Enclosed is my check/money order payable to the Four Lakes Amateur Radio Club.

Check one:	New Member	Renewal		
Check one:	Regular \$20	Student (u	ınder 18) \$10 🗌	Senior (65+) \$17
	Additional Family Mem	bers \$14 ea	ch (one newsletter	per family)
Name				
Callsign _				
Street Addr	ess			_
City		State	_ Zip	_+
Birthdate _				
Telephone				
ARRL mem	nber?	No		
E-mail addr	ress (optional)			
	form and your check to N n Avenue, Madison WI		ranzen, K9SAM,	FLARC Treasurer, 2652 East

## Four Lakes Amateur Radio Club

c/o Peg Haese KB9LIE, Editor 2637 Ninth Avenue Monroe WI 53566-3536

**First Class Postage** 



#### 1999 FLARC Officers

Dave Schaefer, N9DMS, President Mary Jones, KF9ZB, Vice-President Peg Haese, KB9LIE, Secretary Marylynn Franzen, K9SAM, Treasurer

#### **Directors**

Roger Deicher, K9EMG Steve Ensley, KB9RRM Carol Hoke, NS9L