

IREDELL WIRELESS

Newsletter

W4SNC 146.685- Repeater

Published monthly as a service to the Iredell County Amateur Radio Community
By the Iredell County Amateur Radio Society (ICARS)
P.O. Box 142 Statesville NC 28687

Click to go to ICARS Website

www.w4snc.org

President: Donald Summers, W4DON~~Vice-President: Jim Hoke, W4ONS
Secretary: Tim Misenheimer, KC4MJC~~Treasurer: John Lamson, WB4WRY
Members-at-Large: Howard Hecht W1HO~~Greg Cason, KJ4ENR

Wireless Editor, Tim Misenheimer KC4MJC

MARCH 2010

This month's Meeting will be held at Julia's Tally House. March 11, 2010. Come early (6:30PM) and eat or rag chew. The Meeting Starts at 7:00 PM. All ICARS members and Families are encouraged to attend!

***Iredell Wireless submission cut off date is
the first Thursday of each month***

Iredell County Amateur Radio Society
February 11 2010
Meeting Minutes

The Iredell County Amateur Radio Society met at Julia's Tally house for the regular monthly meeting. President Donald Summers, W4DON called the meeting to order at 7:00 PM. The program, a very interesting video called, The Last Voice From Kuwait, was shown before the business portion of the meeting.

After the video and a short break, the business portion was called to order at 7:30 PM. There were 16 present, 12 members and 4 visitors.

Minutes- A motion was made to approve the January 14 2010 minutes as published, was made and seconded. Motion carried.

Treasurer's Report- Treasurer WB4WRY was absent but submitted a written report dated February 11 2010 to Don, W4DON, which Don read:

A motion was made and seconded that the report be accepted. Motion carried.

Old Business- Don W4DON is trying to get the official Audit Report done. Don then reported that the Budget Committee has submitted a budget of \$704.28.

New Business- No new business reported.

Committee Reports:

Emergency Preparedness Committee-Dennis White, N4WHK reported there was an exercise the first week in February. He said he was disappointed with the participation for this event. Dennis stated he was concerned that if we had a real event, would there be enough manpower to handle it.

Dennis also reported that he had received \$250.00 donation from JC Penney for volunteering his time and efforts with ARES.

Society Publications-No report

ICARS Directory- Don reported that one member wanted a printed copy of the directory.

Publicity Committee-Howard Hecht, W1HO reported that he sent out several e-mails to remind people of the meeting and the program for this month. Howard is also trying to get information together to send to the Statesville newspaper.

Field Day- Field day is June 26th and 27th at McClure park

Technical Report- No report.

Respectfully Submitted,
Tim Misenheimer KCAMJC
Secretary

Correction/Addition to the February 11 2010 minutes

My apologies, but I forgot to bring to the members attention at the meeting that, with a great amount of help and guidance from Jim Hoke, W4ONS, I was able to file the yearly report with the IRS regarding ICARS 501 (c)(3) status. Thank you Jim!

Tim Misenheimer KCAMJC
Secretary

PROGRAM FOR THE MARCH 11 MEETING

Good morning Jim,

My students are working hard and learning a lot. They are very excited about March 11.

My Communications class will be giving the presentation. The presentation is using LEGO Mindstorm robots to move a box around a circle. Like a manufacturing plant moving something down a line. We will use a crane, conveyer belt, and a transporter vehicle. I plan on giving a short presentation in the beginning about the Electronics Engineering Program, then introduce my students and let them show off.

Your publicity chairman may want to contact the Statesville Record and the Mooresville Tribune. They always seem to be interested in this.

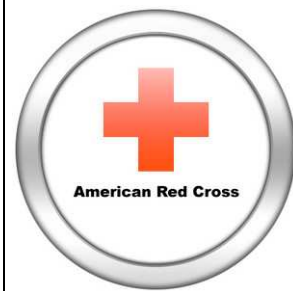
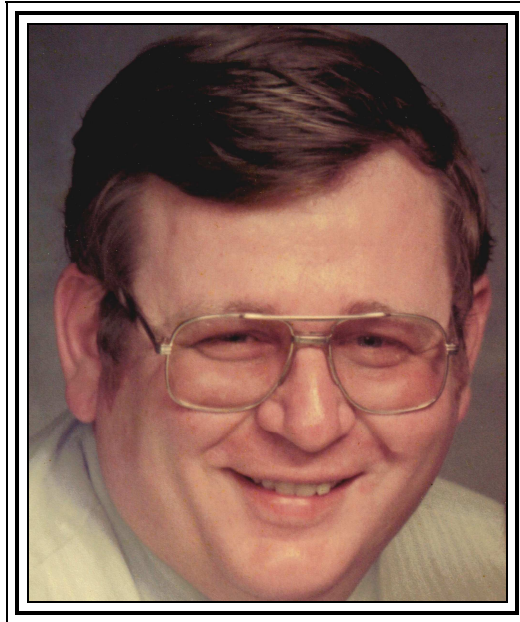
Amy Troutman Chappell
Program Coordinator Electronics Engineering Technology
Mitchell Community College

Don't Forget!

We go to Daylight Savings Time this weekend. March 13-14th.
Remember to turn your clocks ahead one hour, so we all can
lose that hour of sleep!

~Member Spotlight~

~Member Spotlight~



EDMOND "ED" L PUCKETT, K4ELP
252 SUMMERTREE DRIVE
TROUTMAN, NC 28166
k4elp@yahoo.com

Organizations I'm a member of and have been a member of:

Organization	Position Held	#Years
ARRL	Member	1.5
Iredell County ARES	Member	2
ICARS	Member	2
Beulah Heights Wesleyan Church	Member	3
American Red Cross	Disaster Service Chairman	6
U. S. Army	Communications	9.5

My interests in amateur radio are:

Interest	Modes / Types	Comments (Be specific)
HF	SSB	Hope to get my General License soon.
VHF	FM & SSB	
Field Day Oprn.	FM & SSB	
ARES	FM	Formal Msg Handling Class & Active Participation
Net Control Station	FM & SSB	Have been Net Control Station a few times
Learning Morse	CW	
PSK31	HF	
ICARS Committee Member	A/V Tech	Ad Hoc Committee Chairman in 2010
Community Service	ARC	
ARRL	Member	

Why 50 ohm coax ?

From URL:

http://www.epanorama.net/documents/wiring/cable_impedance.html

Standard coaxial line impedance for r.f. power transmission in the U.S. is almost exclusively 50 ohms. Why this value was chosen is given in a paper presented by _Bird Electronic Corp._ Standard coaxial line impedance for r.f. power transmission in the U.S. is almost exclusively 50 ohms.

Different impedance values are optimum for different parameters. Maximum power-carrying capability occurs at a diameter ratio of 1.65 corresponding to 30-ohms impedance. Optimum diameter ratio for voltage breakdown is 2.7 corresponding to 60-ohms impedance (incidentally, the standard impedance in many European countries).

Power carrying capacity on breakdown ignores current density which is high at low impedances such as 30 ohms. Attenuation due to conductor losses alone is almost 50% higher at that impedance than at the minimum attenuation impedance of 77 ohms (diameter ratio 3.6). This ratio, however, is limited to only one half maximum power of a 30-ohm line.

In the early days, microwave power was hard to come by and lines could not be taxed to capacity. Therefore low attenuation was the overriding factor leading to the selection of 77 (or 75) ohms as a standard. This resulted in hardware of certain fixed dimensions. When low-loss dielectric materials made the flexible line practical, the line dimensions remained unchanged to permit mating with existing equipment.

The dielectric constant of polyethylene is 2.3. Impedance of a 77-ohm air line is reduced to 51 ohms when filled with polyethylene. Fifty-one ohms is still in use today though the standard for precision is 50 ohms.

The attenuation is minimum at 77 ohms; the breakdown voltage is maximum at 60 ohms and the power-carrying capacity is maximum at 30 ohms.

Another thing which might have lead to 50 ohm coax is that if you take a reasonable sized center conductor and put a insulator around that and then put a shield around that and choose all the dimensions so that they are convenient and mechanically look good, then the impedance will come out at about 50 ohms. In order to raise the impedance, the center conductor's diameter needs to be tiny with respect to the overall cable's size. And in order to lower the impedance, the thickness of the insulation between the inner conductor and the shield must be made very thin. Since almost any coax that *looks* good for mechanical reasons just happens to come out at close to 50 ohms anyway, there was a natural tendency for standardization at exactly 50 ohms.

I C A R S
FM and HF Nets
MARCH
2010

Net Manager: W4DON

2m FM NET 2100 L 146.685		10m CW Net 2000 L 28.150		10m SSB Net 2100 L 28.468 USB	
Date	NCS	Date	NCS	Date	NCS
3	N4ACF	6	W4DON	6	N4ACF
10	KC4MJC	13	No Net	13	W4DON
17	W1HO	20	N4ACF	20	W4DON
24	WB4WRY	27	N4WHK	27	WB4WRY
30	KC4MJC				

Thanks for volunteering to be a NCS

Please call your Net on time

Remember . . . Net will not be called if call sign is missing for that date.

CHARLOTTE HAMFEST March 13 & 14, 2010

AT

CABARRUS ARENA

Admission at door \$10.00

Pre-register Ticket \$7.00

©ICARS