KEY KLIX

The Monthly Newsletter of the Meriden ARC June 2009

May Activity Meeting Well Attended

The May 28th activity meeting had a larger than average turn-out of club members. The subject was all about home electrical grounding. An excellent presentation was put on by Art Dutra from the Town of Wallingford Electric division. Art provided handouts to everyone, which included 60 pages covering home electrical wiring and grounding as well as Ham Radio related information regarding RF grounding and lightning protection.

Although not an Amateur Radio operator himself, he proved to be quite knowledgeable in the area of ham shack wiring, RF grounding and lightning protection. And his presentation was filled with many tips that most of us had never thought about.

For example, we should inquire at our local town's electrical division to insure that we actually do have on record an actual town inspection from it's electrical division. That is just one thing we take for granted. Should you have some kind of damage to your home that may be electric related like a fire, the first thing your insurance company will do is to check with you town to make sure your home was inspected and it's electrical system up to spec.

We were also treated to some interesting things regarding new and upcoming electrical requirements. One topic was “Inter-system” bonding. With today's proliferation of electronics, many of the IEEE requirements are being changed. Art went into detail about this soon to be required rules, where various systems, (Radio, Computer, and other electrical sub-systems) will need to be inter-connected (bonded) to a common ground.

And we found out how best to ground your antennas and shack. Did you know that it is best to provide at least two driven grounds rods? Probably so. However Art filled us in on the “proper” way to do it. For example, the multiple rods have to be a certain distance from each other, based on how deep they are into the ground. For example if you had three ground rods, each four feet long, they should be spaced from each other at about eight feet.

If you missed this activity, you missed a great one. Thanks Art.

In This Issue

The Prez Sez

Hello Friends:

Well, it's June, even if today feels like April weather. I hope you are all doing well. Got those gardens planted yet? How about that new antenna?

June, of course, means Field Day. It's the most popular activity of the year, and we'll be doing our usual extravaganza with a few new twists. Field Day is as always the fourth full weekend in June. This year that's June 27th and 28th. We'll start setting up at 2PM local on Friday, June 26th. We'll be at Marcus Cooke Park on Old Rock Hill Road in Wallingford, just opposite the Rock Hill Elementary school and just east of the Church where we have the Christmas Party.

We need **YOUR** help. We've simplified our set-up, but it still takes man/womanpower to get everything ready to go. Please plan to be there Friday and give us a hand. We'll also be hosting our very popular Sunday Afternoon take-down party. The fun begins at 2PM local on Sunday. Dancing Girls, free beer, and large cash awards are all possible. If you're not there, you'll miss it all.

Something new for this year is our first ever Field Day Jam. Several of our musically inclined members will be bringing instruments and going at it, starting at about 6PM local on Saturday. If you play something anything bring it out and join in on the fun. Banjo? Guitar? Sax? Keyboard? Accordion? Whatever your specialty, you're welcome to join. And the best news is if enough players show up, I won't have to sing. My silence is sure to be welcome, eh?

Field Day means food, too. We'll have burgers and dogs, and of course my patented Roadkill™. On the way back from the Dayton Hamvention, I stopped for gas in Punxsutawney, PA. As luck would have it, right there in town was a Groundhog on the side of the road. Naturally, I scooped him up to add to this year's feast. I hope you'll all come by and get your "Phil" of the Roadkill™. (Aaarrrggghhhh, couldn't resist, sorry.) But please do come by and have something to eat. And bring something…. Desserts, appetizers, special treats, something you really like and want to share. We've had a great variety over the years and would appreciate anything you care to contribute, even if it's only a bag of chips and a container of dip.

Speaking of FD food… as I write this, we're still looking for someone to step forward and do Sunday morning breakfast. W1DMM has done it for many years but cannot do so this year. It can be as simple or elaborate as you like. The club will reimburse you for all expenses. Please let me know that **YOU** are willing to help out **YOUR** club and do this.

What am I forgetting? Oh yeah…. Radio operating. We'll have dedicated stations for HF CW, HF SSB, and VHF/UHF. Plus a GOTA (get on the air) station for new or generally inactive Hams. The GOTA station also includes friends, spouses, or other unlicensed folks who are interested. In short, anyone and everyone will be able to sit down and play radio.

Finally…. A little competition is good. So I'm announcing the first annual President's Challenge. W1NRG has historically finished in the top 10% of its class, and in fact finished #1 for a few years. It's time that we move closer to our rightful place at the top. To help get us there… the station that shows the best improvement from their average over the past 5 years will earn a "Dollar of Glory" from my pocket. Plus (if it gets done in time) a handsome trophy that will not only confer extensive bragging rights but will also be a great addition to any Amateur Radio Station.

73, John Bee, N1GNV

Last Call for Pins

Skip, W1SKP has one pin left. These were for the 75th anniversary ARRL SSB Sweep Stakes contest. The MARC SSB crew garnered a "Clean Sweep" last year, so these special pins should become a MARC collector's item. They are bigger than the normal Sweep Stakes Pins we're used to seeing. Get in touch with Skip as it going to go to first come first served. Only one left.

Striking Back At Lightning Strikes .. Forewarned Is Forearmed.

Following the very nice presentation by Art Dutra of the Wallingford Electrical Division last night (27-May-09), I thought it would be good to share some information with Key Klix on how K1SEZ stays ahead of the summer nemesis of lightning. Fingers crossed, so far, so good! Thanks to Al Gore's invention of the World Wide Web, guys who stick wire and aluminum on tall conductive towers in the air can stay ahead of bad weather by checking out the occurrences of lightning strikes in our region. With the onset of warmer weather here in New England, it's a good idea to know when to duck for cover!

Besides the inline lightning suppressors in my coax runs connected to the solid copper ground buss on the back of my operating desk, I like to pull the coax connectors out of the transceiver connections hanging down below near my feet if I am aware of local storms that will produce lightning.

This year, I'm planning to re-do the continuous 150 foot coax runs from the rig out to the G5RV and 2m/70cm vertical and install easily removed connectors at the place where the coax goes into my buried plastic pipe that carries the coax under the lawn behind the deck. That will allow me to disconnect the coax runs from entering the house completely. A second part of the project later this year will be to have a separate 20 amp - 120 vac line run to the operating shack area with a quick throw, big disconnect switch for unhooking all of the electrical power from SEZ's shack, including the PC. (This also prepares me for the possibility of a slightly bigger Ameritron amp, upgrading a bit from the AL-811 to perhaps the AL-811H).

But, back to the websites. First, I like to put this Vaisala website on my Favorites button http://thunderstorm.vaisala.com/explorer.html It displays the USA with states outlined, and lightning strikes that are color-coded with respect to when they occurred relative to "now" It's the one I mostly use. Another website that presents a lot of weather information is, of course, Intellicast, and their website showing current USA lightning is at www.intellicast .com/Storm/Severe/Lightning.aspx Finally, THE WEATHER CHANNEL has a similar presentation at www.weather.com/maps/ activity/golf/uslightningstrikes_large.html

If I'm going on vacation, or away for the day, and Doctor Mel or Jeff Fox is talking about electrical storms, I do my "disconnect the coax routine", and feel "better".

As a final note regarding Murphy's Law, I also have ham radio insurance from "Ham Radio Insurance Associates, Inc" of Canonsburg, PA, which costs me $100/year for $5,000 for radios, $1,000 for Data/Programs/Media, and no tower or antennas coverage.

In closing, I'd like to ask a question of our more mature club members regarding what to do with the disconnected coax runs coming from the antennasÿ… Should I put in a grounding bar that connects the antennas to a ground rod? Or, is it better to just let them dangle free, away from the house/deck area a few yards? Good luck this summer!

73 de K1SEZ, Paul Ciezniak

The Great Iambic Paddle Myth

The tools of the CW operator are often described as an item of beauty to the user and as an item of awe to the observer. CW keying systems have ranged in complexity from the simple straight key switch, to the balanced mechanical bug, to a variety of paddles with electronic keyers, and on to a host of software based computer keyboards. The electronic keyer or simply a keyer is a device that generates a dot or dash based on which of two input switches is closed. The earliest keyers were simply RC circuits that enhanced the timing and spacing of mechanical CW bugs. Electronic vacuum tube versions were often too complex and heavy to be practical.

The availability of the transistorized keyer in the 1950s gave birth to the dual paddle or “iambic” paddle system. The name comes from the poetic rhythm term, iambic meter. A pattern of stressed and unstressed syllables, such as deDUM deDUM deDUM, and may sound similar to the di-dah di-dah di-dah of alternating CW. The iambic pattern is affected by depressing or squeezing the dual paddles simultaneously. The electronic keyer system was touted to be a boon to operators by being more efficient and less physically stressful to use. But are these claims just marketing hype and a propaganda myth to sell more electronic keyers?

Early professional wireless operators developed a “glass fist” carpal tunnel syndrome from the constant up-down motion of pounding brass. Rotating the key to use a horizontal forearm motion instead of the vertical wrist action of the traditional straight key eased this physical ailment. The sidewinder or cootie key, with their left-right motion, became popular; a design feature that continued to the CW bugs and paddles of later years. It seems this part of the public relations blitz is accurate.

Manufacturers of electronic keyers, especially with iambic paddles, expounded the efficiency of their devices in the keystroke savings during a QSO. An exhaustive study by Chuck Adams K7QO sheds some objective light on this debate. Using a model of all twenty-six letters and all ten numbers, Adams found that a straight key required 132 keystrokes, a semi-automatic bug required 87, a non-iambic keyer required 73, and an iambic electronic keyer required only 65 keystrokes. WOW! A bug is 34% more efficient than a straight key, a non-iambic keyer is 45% more efficient, and an iambic keyer is a huge 51% more efficient than the venerable straight key. The increase in efficiency between the iambic and non-iambic keyers is due to those squeezable rhythmic letters of C, F, K, L, Q, R, and Y. Does this prove the assertion? Can a marketing proclamation be accurate? Hmmm, not so fast Mister Park Avenue.

The above data is valid if your QSO consists of repetitive sets of the complete alpha-numeric character group. Yes, all thirty-six of them. But a ham operator's ragchew closely follows an English-text frequency distribution of characters; skewed slightly by Q signals, calling CQ, random call signs and a spattering of jargon. A contest exchange is more random, but seldom follows the complete 36 character allocation. A standard reference of cryptographers and typesetters is the letter distribution table, which shows the frequency of each letter occurring in ordinary text or in specialized tables for other text, such as scientific or medical writing. Surprisingly, the first five to seven characters of all these tables are the same letters. The typesetter's Linotype machine incorporates this frequency distribution with the home keys of E, T, A, O, I, N, S, H, R, D, L, and U. Only two of the iambic squeezable letters, R and L, can be found in this list of most frequently used English letters.

When Theodore Vail established the Internation

al Morse Code, in deference to the American Morse Code defined by Samuel Morse, he used textual letter frequency to assign the dot-dash combinations. Vail's foresight provided the maximum sending efficiency in this distribution based assignment. His assignment also relegated the iambic "squeezable" characters to the less frequently used letters, fundamentally usurping the iambic claim to efficiency. Even allowing for the skewed distribution of a ham operator's QSO, the touted savings of iambic sending over non-iambic sending seems to be more wishful thinking than reality. The 11% efficiency gain (from the K7QO table above) seems a stretch a gain of less than 5% is in all probability realistic. With a 5% gain, you could increase your 20 WPM QSO to 21 WPM without any change in energy. But is it worth the struggle?

To utilize iambic keying, you must learn or relearn your keying technique. Instead of pounding out those seven letters, you must learn to squeeze them out. The electronic gates in the keyer must recognize the near simultaneous compression of the paddles, and paddle release, within a few milliseconds. The leading depression of the left or right paddle to start with a dot or a dash must be detected within this interval. As your sending speed increases, this gating interval decreases even into the microsecond range. Often, sending accuracy suffers to affect the iambic keying benefit.

My apologies to those versed in iambic keying, it is an art form to be proud of. But a goal of iambic keying appears to be one of diminishing returns. Yet the use of horizontal keying; sidewinder keys, mechanical bugs, or electronic keyers; reduces the physical muscle strain and can improve your sending efficiency just be careful of the Iambic Myth.

[Grid_Dipper@Prodigy.net]. GD

The Big Move

We've been fortunate to have use of the entire 2nd floor in the OEM building for many years. We have a fantastic radio room, library, kitchen and a large meeting area.

But due to today's legal climate, where every town now has to worry about potential law suits and litigation and the worsening financial crunch, we are seeing a lot of belt-tightening, cut-backs and new restrictions.

So we have good news and bad news.

The good news is that we are moving everything to the first floor in the OEM building. That means a smaller meeting room, but one that is much **cooler** in the Summer and **warmer** in the Winter. One of the requirements for town owned buildings that are accessible to the public, is that they be handicapped compliant. We have been sort of flying under the radar for some years now in that area. The stairs to the second floor are of course not compliant. Nor is the rest room or kitchen. The good news is that the first floor of the building "has" been brought into compliance. There are NO stairs needed to get to the first floor, and the rest room is fully handicapped enabled.

This will be good news for some of our elder members who may have been missing meetings due to the long stair climb. The first floor is even wheelchair accessible.

So as of June 1, all our meetings will be in the Office of Emergency Management building's office area. Chris, WA1VXH and Rich, WA1TRY are working with the town and our long time benefactor Ernie Frattini (the town OEM manager) to make some modifications to the downstairs office area. The plan is to open up the space a little so we can handle our usual 30 or so members at regular meetings. And we hope to be able to include a down-sized radio shack area.

The bad news is that the radio shack will be nothing like our old one. Rich says he will use every ounce of his creative juices to come up

with a design that will work. But space is at a premium. We also are going to loose the use of the kitchen. In fact the stairwell to the upstairs is going to be closed to everyone. Storage space is also going to be considerably less than we currently have.

Along those lines we are going to have to loose all the “donated” stuff that is now piling up in Rich's upstairs office. In the future we are going to have to ask that any donations in the form of equipment be stored off-site until we can dispose of them at the club's table at the annual Nutmeg Hamfest. We just don't have the storage space to accommodate boxes of computer and radio gear any more. Some of which we end up having to dispose of by bringing them to a recycling center. (You just can't just “toss” electronic stuff anymore).

We also will be cleaning out the garage. All of the club member antennas have to be returned to their owners. A lot of the older stuff on the back shelves is going to be tossed out. We hope we will end up with enough room to store wire antennas, rope and coax as well as some radio equipment left over from the old shack.

We also need a new home for the packet cluster.

Also, we will have to get rid of most of the library, keeping only the most current books for reference in the new shack.

Because we are now going to be using the town's actual Office of Emergency Management offices, access to the building will have to be much more secure. There will be no keys available. This means that for any event or meeting, either Ernie, Chris or Rich will have to open the building. Both Chris and Rich will work together to allow us to still have meetings and run the shack for contests and such.

But, we can not leave the building while it's being used. So (either Chris or Rich) will have to open and hang around until the end of the event, when they will secure the building. Neither of them are happy about this, but are willing to work together to not hinder our club's usual use of the building. There is no room for debate or even suggestions. We have been handed new rules and that is the end of the story.

However, you should know that the ***easiest*** thing the town ***could*** have done would would have been to change the locks and put all our stuff on the front porch. Ernie and the town are putting considerable work into this. We still have a place to meet and we will still have a club station (albeit a more modest one)

We will still have use of the town truck and generators as well as use of the town park for our field days.

We will just have do do a little “down-sizing” like everyone else is doing these days. This isn't really so much of a “bad” thing after all. Look at what the alternative could have been.

There will be much more about this in future Key Klix. Stay tuned.

Station Activities

Well gang I'm in mourning over our (RIP) station. That fancy shack upstairs was my pet project. Many years ago, after the demolition of the upstairs, I worked closely with the town's officials and the architect for the project. Ernie gave me carte blanche and the entire shack was of “TRY” design. Our club shack was the envy of most other clubs. Alas .. it's now being changed to museum status. And an off-limits museum at at that!

So I'm now looking forward to yet another challenge. Something like trying to fit a gallon of radio gear into a quart container. Of course everyone knows I love a challenge and don't know the meaning of “moderation”. I'll make it better somehow. *73, de WA1TRY SAM*

Secretary Report & Minutes of Meriden Amateur Radio Club
May 2009

The business meeting opened at 1930 on May 14, 2009 with approximately 19 people in attendance. A quorum was present. VP Jim N1ZN presiding.

Announcements -

- Introductions.
- Next meeting is on Thursday, May 28th at 7:30 PM - An activity meeting.

Secretary's Report -

- Accepted as published.

Treasurer's Report -

- Accepted as presented.

Contributions

- Scholarship $22 from VE activity.
- Scholarship Jack Selmecki (sp) donated a mechanical bug key. Funds realized to the scholarship fund.

Correspondence

- QSL cards

Scholarship (KE1AY)

- Application date is closed.
- Reviewing for award.

Club Station & Facilities - (WA1TRY-SAM)

- See May Key Klix for SAM report.
- In preparation for Field Day.

Club Activities & Program (KB1CIW-P&E Chair)

- A Boy Scout Jamboree will be held at the Orange Fairgrounds on May 15 to 17, 2009. A HF station will be set up but also use 147.36R if condx is not good. Listen to the repeater for contacts. About 3000 scouts are expected.
- May activity will be a talk by Art Bultra of Wallingford Electric on grounding. See May KK.
- June activity will be final prep Field Day. July activity will be on ARES.
- November SS-Phone pins and mugs are in and distributed.
- Please add your ideas and suggestions for activity meetings to the MARC Forum or contact KB1CIW.

Nets - All nets are doing well. Report in Key Klix.

- HF-SSB 28.375 Tuesdays at 8:00 PM, NC John K1VDF.
- VHF-FM 147.36R Tuesdays at 7:00 PM, NC Bob KB1CIW, KB1MEK, W1POP, W1SKP and others as required.
- VHF-SSB 50.175 Mondays at 8 PM, NC Jim N1ZN & Skip W1SKP

Castle Craig - (N1API-CM)

- 10/10 QSO parties SSB Aug 1-2nd, Mobile Mar 2010, CW Nov 2009, Dig Nov 2009
- Some special point earners reported.
- Al N1API will be manning a Castle Craig table at the Orlando Convention in July. See May KK.

Membership - (KB1HCC)

- Motion by KB1HCC second by KB1CIW to accept Morton Krantz K1VHF of Branford and Mike Staffa KB1SIO (son of N1KGP) of Northford. Passed unanimously.

- Sixty-two 2009 members more or less.

Interference and Technical - (WA1TRY)

- Nothing to report.

Instruction - (VE-KE1AY, Instruction Facilitator - Open)

- A very successful session with eleven students. All the students and six of seven walk-ins passed at least one license level. See May KK for story and new calls.
- Next VE session is scheduled for the Nutmeg Hamfest in October.

Candy Store - (N1ZN)

- Several members have used the new vendor with good reports
- Hats available see N1ZN.

Key Klix - (WA1TRY & staff)

- Running OK.

EmComm - (WA1VXH)

- MS Walkathon on Sunday April 19th was a success. Thanks to those who participated. See May KK for article.
- MARC also assisted SCARA providing most of the help and the repeater in the recent Walk-a-thon at Choate. FB to the participants.
- Next comms event is in September. Watch for details and help out.
- Those participating in the Bio-threat exercise will report to the Headquarters Fire Station at 8:45 AM on Tuesday May 19th.
- A CERT training program is being scheduled.

Field Day (June 27-28)

- Planning is underway for a MARC 2A Class station at Marcus Cook Park. Area gurus are: CW-W1KKF, SSB-W1SKP, VHF-W1DMM & WB1GYZ, GOTA-KB1CIW & N1KGP, Food-N1GNV, Power-WA1VXH, others to be published.
- Need guru for the Satellite station. This is a 100 point bonus station. Bill W1KKF will operate (his success is legendary) if a guru steps up. Step up and volunteer, especially if you have some experience working the birds before.
- Get involved; make your operating preference known to the gurus.

Miscellaneous

- Preparations for the Nutmeg hamfest are underway. October 11th, see N1ZN to help out.

50/50 W1SKP

Meeting Adjourned about 20:28

Submitted Dan Murphy, W1DMM, Secretary

MeriMeriden Amateur Radio Club
Field Day June 27th & 28th
Marcus Cooke Park Field
Old Rock Hill Road
Wallingford, CT

CT Tour de Cure

From the Manager of the "Tour de Cure"

I was hoping that members from the radio club would help us during an event next weekend, June 14th. It's the Tour de Cure, a bicycling event benefiting the American Diabetes Association.

Takes place at Gateway Community College, North Haven Campus. From 6am- 4pm. the first group goes out at 6:30am. We really need only 2 or 3 radios from 7am- 3:30pm. One at our headquarters at the school. One mobile with our safety crew and one stationed at the furthest rest stop in North Branford. Can you help?

Thanks Greg

Gregory W. Latz
Manager/ Tour de Cure
American Diabetes Association
306 Industrial Park Road, Ste. 105
Middletown, CT 06457

203-639-0385 x3533
Fax- 860-623-5098

What say guys? Can we drum up a few volunteers? Get in touch with Greg

Club Nets

2 Meter FM Net. Net control KB1CIW

Guest NC, K1TDO, KB1SIT

May check ins total 25. (only three weeks of logs submitted).

6 Meter SSB Net Net control N1ZN

Guest NC, K1MVM

May check ins total 9 (only three weeks of logs submitted.

10 Meter SSB Net Net Control K1VDF

No logs submitted for May.

Note! We still need someone who participates in the HF SSB net to post the log information to the club BBS (or send it to the Key Klix). Also Mike, KB1MEK who has been faithfully posting the six and two meter information will be away for a few weeks. We need someone to get the information posted.

The Station Activities Manager is the keeper of all logs and net information. That's one of his duties. Ergo the "station ACTIVITIES manager" title. Please help out your poor over-worked and under paid SAM. Just send him a simple list of check-ins with the start and stop times of the net. wa1try@cox.net. Or post the information in the Net Forum on the club BBS/Forum at www.w1nrg.com/forum/

Sunspot activity (or lack of same)

QST de W1AW
Space Bulletin 004 ARLS004
From ARRL Headquarters
Newington, CT June 2, 2009
To all radio amateurs

SB SPACE ARL ARLS004
ARLS004 NASA Releases New Predictions for Solar Cycle 24

An international panel of experts -- led by the National Oceanic and Atmospheric Administration (NOAA) and sponsored by NASA -- has released a new prediction for the next solar cycle: Solar Cycle 24 will peak in May 2013 with a below-average number of sunspots. "If our prediction is correct, Solar Cycle 24 will have a peak sunspot number of 90, the lowest of any cycle since 1928 when Solar Cycle 16 peaked at 78," said panel chairman Doug Biesecker of NOAA's Space Weather Prediction Center (SWPC). This report clarifies a NOAA report from earlier this month that stated

that Solar Cycle 24 would bring “90 sunspots per day on average.” The latest forecast revises an earlier prediction issued in 2007. At that time, a sharply divided panel believed solar minimum would come in March 2008 followed by either a strong solar maximum in 2011, or a weak solar maximum in 2012. “It turns out that none of our models were totally correct,” said Dean Pesnell of the Goddard Space Flight Center (GSFC) and NASA's lead representative on the panel. “The Sun is behaving in an unexpected and very interesting way.”

In 2007, experts varied in their predictions on when the solar cycle would peak and how strong it would be. In April of that year, NOAA, in coordination with an international panel of solar experts, predicted that the next 11-year cycle of solar storms “would start in March 2008, plus or minus six months, and peak in late 2011 or mid-2012.” In the cycle forecast issued in April 2007, half of the panel predicted a “moderately strong cycle of 140 sunspots, plus or minus 20, expected to peak in October 2011. The other half predicted a moderately weak cycle of 90 sunspots, plus or minus 10, peaking in August 2012. An average solar cycle ranges from 75 to 155 sunspots. The late decline of Cycle 23 has helped shift the panel away from its earlier leaning toward a strong Cycle 24. The group is evenly split between a strong and a weak cycle.”

At a meeting of the American Geophysical Union in San Francisco in December 2007, David Hathaway of NASA's Marshall Space Flight Center, along with colleague Robert Wilson, said that Solar Cycle 24 “looks like it's going to be one of the most intense cycles since record-keeping began almost 400 years ago.” They said they believe the next solar maximum should peak around 2010 with a sunspot number of 160, plus or minus 25. “This would make it one of the strongest solar cycles of the past 50 years -- which is to say, one of the strongest in recorded history.” Four of the five biggest cycles on record have come in the past 50 years. “Cycle 24 should fit right into that pattern,” Hathaway said.

Right now -- June 2009 -- the solar cycle is in a valley, the deepest of the past century. In 2008 and 2009, the Sun showed some of the lowest sunspot counts on record, as well as weak solar winds and a low solar irradiance, going more than two years without a significant solar flare. “In our professional careers, we've never seen anything quite like it,” Pesnell said. “Solar minimum has lasted far beyond the date we predicted in 2007.”

In recent months, however, Pesnell said that the Sun has begun to show some small signs of life: Small sunspots and “proto-sunspots” are popping up with increasing frequency. Enormous currents of plasma on the Sun's surface are gaining strength and slowly drifting toward its equator. Radio astronomers have detected a tiny but significant uptick in solar radio emissions. All these things are precursors of an awakening Solar Cycle 24 and form the basis for the panel's new, almost unanimous forecast.

Pesnell cautioned optimism, telling the ARRL that there is an “error bar of ÿ± 20.” This means Solar Cycle 24's sunspot number could be as high as 110, or as low as 70. “Based upon my own personal research, I don't think we'll see 90 [sunspots in Solar Cycle 24],” he said.

When asked if such a low number foretold the beginnings of a Maunder Minimum, Pesnell said that a Maunder Minimum takes several cycles to appear: “Sunspots [in solar cycles] leading up to the Maunder Minimum took several cycles to disappear. I really can't predict what will happen in Solar Cycle 25. What we're seeing now is something that look likes a sunspot, but it looks as if someone has come along and 'stomped' on it, creating a multitude of little things. We don't have a name for this and we've never seen anything like it before.” There could be more surprises, panelists acknowledge -- and more revisions to the forecast. “Go ahead and mark your calendar for May 2013,” Pesnell said. “***But use a pencil***.”
NNNN
(from the club BBS - Thanks to N1API)

Club Information Page

Meriden ARC PO Box 583 Meriden, CT 06450

MARC 2009 Officers

President - John Bee	N1GNV	
Vice President - Jim Savage	N1ZN	james.savage@snet.net
Secretary - Dan Murphy	W1DMM	w1dmm@arrl.net
Treasurer - Jonathan Winslow	KB1HCC	
Station Activities Manager - Rich Aubin	WA1TRY	wa1try@cox.net

Committees

Key Klix Editor - Rich Aubin - WA1TRY WA1TRY@COX.NET
Key Klix Staff - Dan Murphy - W1DMM, John Bee - N1GNV
Program & Entertainment - Bob Stephens KB1CIW
Club QSL Manager - Bob Kaczor - KE1AU
VE/Education - Volunteer needed
Membership - "Haggie" Winslow - KB1HCC
Castle Craig - Al Kaiser - N1API
Interference & Technical - Rich Aubin WA1TRY

Club Nets

28.275 mhz	CW Slow Net	Mondays	7:00pm (NC W1JKP)
50.175 mhz	VHF SSB	Mondays	8:00 pm (NC N1ZN & W1SKP)
28.375mhz	HF SSB	Tuesdays	8:00 pm (NC K1VDF)
147.36 R	FM	Tuesdays	7:00 8:00 pm (NC KB1CIW)

Membership/ Dues: regular $15 Senior $10 Family Member $5.00
Business Meetings - 2nd Thursday Activity Meetings - 4th Thursday of the month.
All meetings start at 7:30 PM

Location of meetings: Wallingford Office of Emergency Management
284 Washington Street, Wallingford, Connecticut
(next to the Wallingford Senior Citizen Center)

Web site: http://www.meridenarc.org/ BBS/Forum: http://www.w1nrg.com/forum/

Business Meeting June 11

Activity Meeting 25

(load the truck)

General parking lot banter
(if it doesn't rain)

Meriden Amateur Radio Club
Post Office Box 583
Meriden, CT 06450

First Class