



THE LED

July 2009

Published by the Livingston Amateur Radio Klub
Howell, Michigan

Livingston Amateur Radio Klub
PO Box 283
Howell, Michigan 48844

www.W8LRK.org

**NET 146.680
SUNDAY 9PM**

CLUB CALL IS: W8LRK

**NEXT KLUB MEETING
Thursday, July 9th, at 7:30PM
EOC, 300 S. Highlander Way
Howell, MI**



BOARD MEMBERS

President	Jim	WB8AZP
Vice-President	Pete	W1LBR
Secretary	Mary	KC8SER
Treasurer	Patrick	W8LNO
Program Manager	Jon	KC8VAB
Tech Director	Les	W8MSP
Director	John	KD8CCR

COMMITTEE CHAIRPERSON'S

Repeater Trustee	Jim	WB8AZP
LED Editor	Michelle	KD8GWX
VE Coordinador	Jim	WB8AZP
PIO Officer	Brandon	KC8YHE
PIO Officer	Jim	N8ENX
Web Site	Les	W8MSP

The Livingston Amateur Radio Klub maintains the 146.680 (Negative Offset, 162.2 CTCSS) and also the 444.525 (Positive Offset, 100.0 CTCSS) repeaters in Livingston County.

Jim's Jive

Welcome to July! Hopefully, you've all been making those plans for new antennas before the weather turns on us again! It's also a great time to test backup power supplies, spare portable antennas and those supplies in your "go" kits. Being prepared isn't just for boy scouts! Let me point out a few other important things this month:

FIELD DAY / BALLOONFEST

Thanks to all of the LARK members who took time out of their weekend to participate in the LARK Field Day, in conjunction with the Howell Balloonfest. I had a chance to pop out to the site briefly and I was very pleased with everything we did as a group. We have a great opportunity to introduce Amateur Radio to the public during these events. Based on what I'm reading, many other clubs have taken to holding their Field Day events in public spaces, so once again, LARK has led the charge!

CLUB PICNIC – WHERE WERE YOU?

Well, the first Klub picnic happened. Too bad most of the members who insist that we have one didn't bother to show up. Perhaps you can bother to attend a meeting and share with us what we have to do to get you there? I thank those members who did make it.

LARK RADIO RAFFLE BEGINS NOW!

You get another chance to be the proud owner of a new Icom D-Star handheld or mobile transceiver, if you're the winning ticket in the LARK Radio Raffle. We're giving away one ID880 Mobile Transceiver and one IC80 Handheld Transceiver to the two ticket holders when we draw the winners at the September 2009 LARK meeting. There are only 100 tickets, each costs only \$20. ANY Klub member can sell tickets if they would like and I expect those members who complained about this in the past to step up and sell a few. You can pick up tickets by contacting Pat, W8LNO. Lets make this radio raffle a success.

PLANNING FOR NEXT RADIO RAFFLE

Bring your ideas as to what we can offer for prizes for the NEXT radio raffle. We want to start planning now, even before our current raffle is over. I'm looking for ideas from the membership. Now is the time for you all to step up and actively participate in choosing what we are going to give away. Remember my "if you're not part of the solution...." speech?

JOE PHILLIPS K8QOE, SK

Unless you live under a rock or have been assigned to active duty at Ice Station Zebra, by now you've heard of the unexpected passing of the ARRL Section Manager in Ohio, Joe Phillips, K8QOE. I knew and worked with Joe for many years and in fact, spent some great moments with him at the Dayton Hamvention just a few months ago. His unexpected passing once again illustrates that none of us are aware of how many hours or moments we have left in this life. I hope, that like my friend Joe, you are making the most of every precious moment you have. I will miss Joe, but I'm grateful to have known him and hope that someday I can become half the supporter of amateur radio he was.

BOARD MEETING FORMAT CHANGES

The LARK Board has decided to conduct its business meetings by using teleconference technology. This will benefit those board members who often have to travel for their occupations. LARK members who wish to listen in will be provided with the bridge number and instructions at the next LARK meeting. If you can't make the meeting or can't make any other LARK sponsored event, do you really want to listen to a board meeting anyway?

INTERNET ACCESS & USE

The June 2009 Census Report suggests that 67% of people in the USA have Internet access in their home right now. They go on to suggest that New Hampshire and Alaska lead with highest percentages, while Alabama and Mississippi lead in lowest percentages. The Internet is one of the most versatile tools available to amateurs today. There isn't a single topic that you can't find information on at your fingertips. Even if you don't have a computer at home, we all pay for internet access at every public library. Your homework assignment is to learn to use the internet. After all, aren't amateur radio operators supposed to be on the forefront of technology?

CERT TRAINING

We are blessed with having an excellent CERT program right here in Livingston County. It's your loss if you are not investing in yourself to take advantage of this. If you're not worth investing in, I can't imagine what is. No matter how much you think you know, be assured you will learn something. This is an ongoing event. Check in with Bruce, N8WWX for details.

WHAT WILL YOU BE DOING FOR THE KLUB?

"Ask not what your club can do for you, but what you can do for your club". (Stolen from a very famous speech). Surely, you do something with your time that you'd like to talk about at a meeting. Perhaps something to demonstrate? I'm confident that you all can contribute something more than the mere conversion of oxygen to carbon dioxide. We have plenty of folks who will help you with photocopies, audio visual materials, etc. Show up to a meeting once and awhile, it'll be good for you.

73



Jim WB8AZP

Finance Report ...

OPENING BALANCE OPERATIONS FUND

June 6, 2009 -----\$1873.75

INCOME

50/50 ----- \$ 86.00

Dues ----- \$ 45.00

Total ----- \$ 131.00

ACCOUNT BALANCE (07/07/09) ----- \$2004.75

EXPENSES

Retirement Awards ----- \$ 212.55

ACCOUNT BALANCE ----- \$1791.45

1000 CD ----- \$1390.51

500 CD ----- \$ 656.85

TOTAL BALANCES JULY 7, 2009 ----- \$3868.81

BAL. FROM EMG FUND AS OF JUNE 6, 2009 ----- \$4702.01

INCOME EXPENSES - Raffle Ticket Expense ----- \$ 92.93

TOTAL Balance as of JULY 7, 2009 ----- \$4609.08

Thought for the day ...

"Only those who dare to fail greatly can ever achieve greatly."

~ Robert F. Kennedy

LARK General Meeting Minutes 6-11-2009

No minutes submitted at this time for the May LED Newsletter.

LARK Board Meeting Minutes 6-18-2009

SECRETARY REPORT - As read

TREASURER REPORT- There is money in the bank. LARK now has the license to hold a raffle.

PROGRAM REPORT – Jon has a program set up for next months meeting.

LED REPORT – Need more articles!!!

TRAILER REPORT – A work party went to the Genoa Fire Department to work on the trailer. Thanks everyone.

THE PREZ: Gave a demonstration of conference bridging for our Board meetings. After much discussion, we decided to hold our meetings this way.

RAFFLE TICKETS: There has been some complaints about only Board Members selling the tickets. The Board decided to open the selling of tickets to the whole group.

Pat made a motion to adjourn and Jim seconded it, the motion passed.

Respectfully submitted,

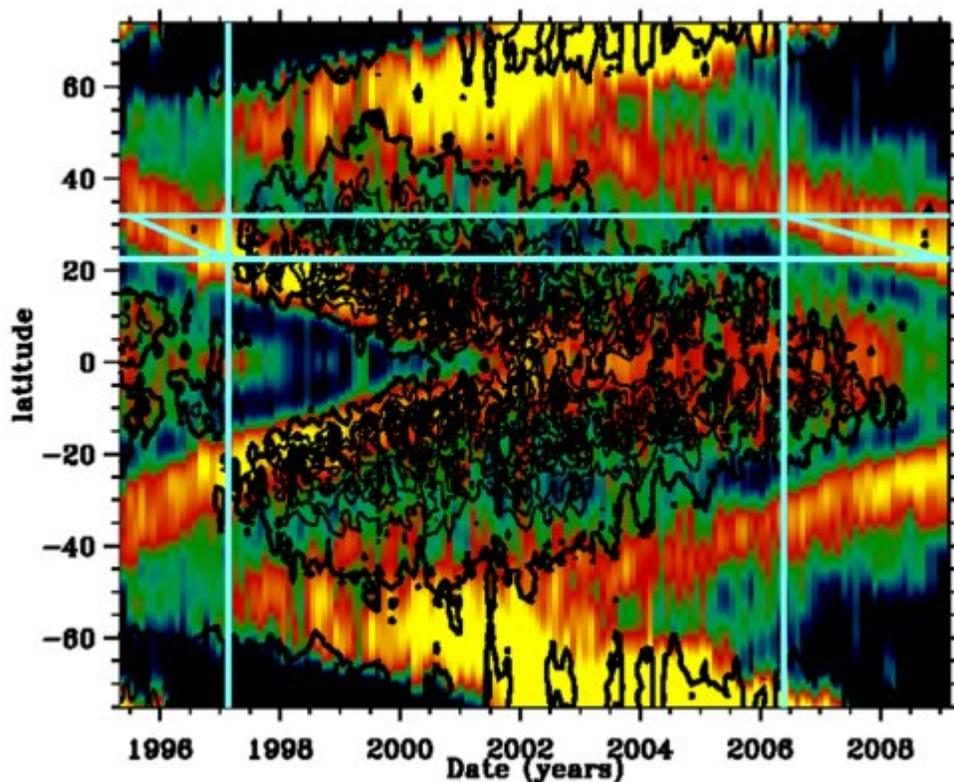
Mary

Mystery of the Missing Sunspots, Solved?

June 17, 2009: The sun is in the pits of a century-class solar minimum, and sunspots have been puzzlingly scarce for more than two years. Now, for the first time, solar physicists might understand why.

At an American Astronomical Society press conference today in Boulder, Colorado, researchers announced that a jet stream deep inside the sun is migrating slower than usual through the star's interior, giving rise to the current lack of sunspots.

Rachel Howe and Frank Hill of the National Solar Observatory (NSO) in Tucson, Arizona, used a technique called helioseismology to detect and track the jet stream down to depths of 7,000 km below the surface of the sun. The sun generates new jet streams near its poles every 11 years, they explained to a room full of reporters and fellow scientists. The streams migrate slowly from the poles to the equator and when a jet stream reaches the critical latitude of 22 degrees, new-cycle sunspots begin to appear.



Above: A helioseismic map of the solar interior. Tilted red-yellow bands trace solar jet streams. Black contours denote sunspot activity. When the jet streams reach a critical latitude around 22 degrees, sunspot activity intensifies.

Howe and Hill found that the stream associated with the next solar cycle has moved sluggishly, taking three years to cover a 10 degree range in latitude compared to only two years for the previous solar cycle.

The jet stream is now, finally, reaching the critical latitude, heralding a return of solar activity in the months and years ahead.

"It is exciting to see", says Hill, "that just as this sluggish stream reaches the usual active latitude of 22 degrees, a year late, we finally begin to see new groups of sunspots emerging."

The current solar minimum has been so long and deep, it prompted some scientists to speculate that the sun might enter a long period with no sunspot activity at all, akin to the Maunder Minimum of the 17th century. This new result dispells those concerns. The sun's internal magnetic dynamo is still operating, and the sunspot cycle is not "broken."

Because it flows beneath the surface of the sun, the jet stream is not directly visible. Hill and Howe tracked its hidden motions via helioseismology. Shifting masses inside the sun send pressure waves rippling through the stellar interior. So-called "p modes" (p for pressure) bounce around the interior and cause the sun to ring like an enormous bell. By studying the vibrations of the sun's surface, it is possible to figure out what is happening inside. Similar techniques are used by geologists to map the interior of our planet.

In this case, researchers combined data from GONG and SOHO. GONG, short for "Global Oscillation Network Group," is an NSO-led network of telescopes that measures solar

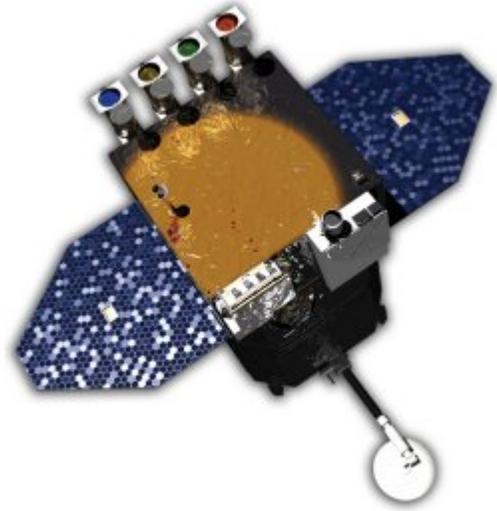
vibrations from various locations around Earth. SOHO, the Solar and Heliospheric Observatory, makes similar measurements from space.

"This is an important discovery," says Dean Pesnell of NASA's Goddard Space Flight Center. "It shows how flows inside the sun are tied to the creation of sunspots and how jet streams can affect the timing of the solar cycle."

There is, however, much more to learn.

"We still don't understand exactly how jet streams trigger sunspot production," says Pesnell. "Nor do we fully understand how the jet streams themselves are generated."

To solve these mysteries, and others, NASA plans to launch the Solar Dynamics Observatory (SDO) later this year. SDO is equipped with sophisticated helioseismology sensors that will allow it to probe the solar interior better than ever before.



Right: An artist's concept of the Solar Dynamics Observatory. [[more](#)]

"The Helioseismic and Magnetic Imager (HMI) on SDO will improve our understanding of these jet streams and other internal flows by providing full disk images at ever-increasing depths in the sun," says Pesnell.

Continued tracking and study of solar jet streams could help researchers do something unprecedented--accurately predict the unfolding of future solar cycles. Stay tuned for that!

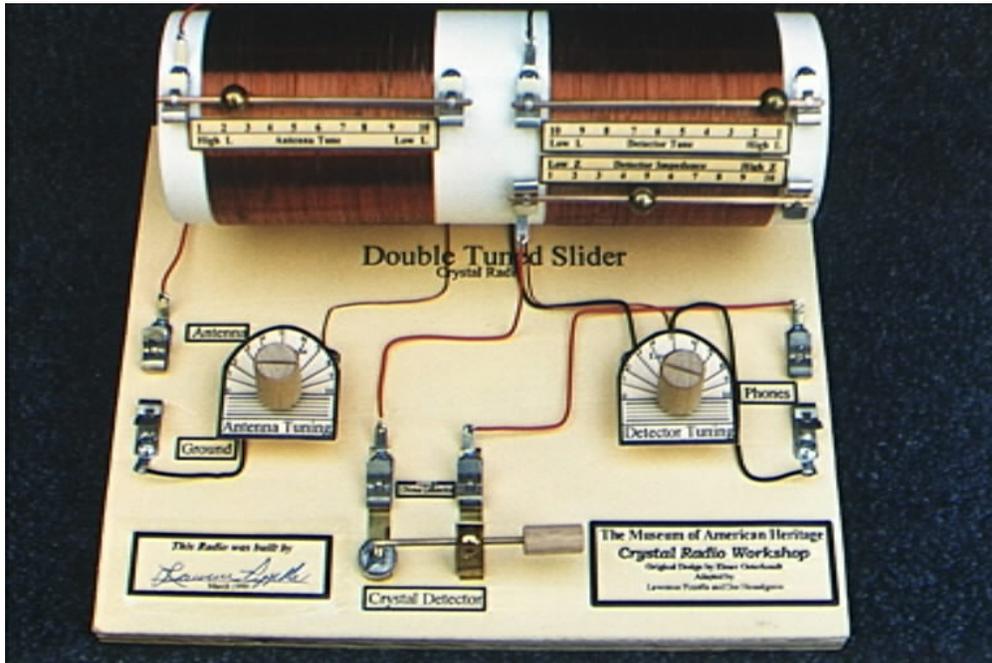
Class/Workshop: How to Build a Crystal Radio

Class Objective

To teach students basic radio theory and history, and basic fabrication techniques for simple electric circuits.

Class Description

The student builds a crystal radio set, winding his own coils, drilling a mounting board and placing all components on it, and then wiring the set according to a schematic. In this course, the students learn radio history dating back to Marconi and Tesla, basic radio theory, modulation, how headphones work, and how to read schematics.



The completed project

Instructors:

Larry Pizzella: His custom radio design recently made him the first-prize winner in a national contest for crystal radio set distance reception

Age range: 10 to 14

Maximum class size: 16 students

Related web sites

[Crystal Radio Resources](#)

[The Xtal Set Society](#)

Recommended reading

All about Crystal Sets: How to Build Crystal Set Radios

Charles Green ISBN:0930003004, 1984

The Crystal Set Handbook and Xtal Set Society Newsletter

Philip N. Anderson, Xtal Set Society, ISBN:1887736034, 1994

Radios That Work for Free

K. E. Edwards, 1977(Available through the Xtal Set Society)

Humor for the day ...

The woodpecker might have to go!



Everything I need to know about life, I learned from Noah's Ark .

One : Don't miss the boat.

Two : Remember that we are all in the same boat.

Three : Plan ahead. It wasn't raining when Noah built the Ark..

Four : Stay fit. When you're 600 years old, someone may ask you to do something really big.

Five : Don't listen to critics; just get on with the job that needs to be done.

Six : Build your future on high ground.

Seven : For safety sake, travel in pairs.

Eight : Speed isn't always an advantage. The snails were on board with the cheetahs.

Nine : When you're stressed, float a while.

Ten : Remember, the Ark was built by amateurs; the Titanic by professionals.

Eleven : No matter the storm, when you are with God, there's always a rainbow waiting.

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Please bring any articles you'd like to have in the next meeting. If you are unable to attend, have a friend bring the information to the meeting for you, email it to me at the above address or feel free to fax it to my work at the above number.

Thanks to everyone for the articles submitted to make the June 2009 LED a success!
