



Sinewaves



STONEWALL JACKSON AMATEUR RADIO ASSOCIATION

Meetings: 3rd Thursday of each month, 1930 hrs at Saint Marks Lutheran Church RT19/98 Clarksburg
SJARA Tuesday Night Net

This net meets each Tuesday evening at 2100 hours utilizing the N8FMD Repeater on
147.210 Mhz with PL Tone of 103.5

August 16, 2010

<u>Net Control</u>	<u>Date</u>
1. K8TPH.....	July 20, 2010
2. N8FWD.....	July 27, 2010
3. WV8JON.....	August 3, 2010
4. K8WWW.....	August 10, 2010
5. WD8NSC.....	August 17, 2010

Next Meeting will be on August 19, 2010

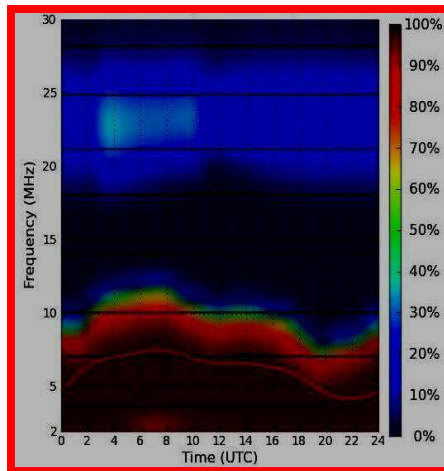
Minutes SJARA Meeting July 15, 2010

The SJARA meeting was called to order at 19:30 by Vice President Mike N8FWD. Minutes were read by Dave N8YPE, and accepted as read. The Treasurer reported a balance of \$1441.96.

Under old business the June Field Day on Lowndes Hill was a success, with the club operating 3 HF stations and a GOTO station. In addition to HF SSB the club operated HF CW and PSK. These modes receive double points. The event also received excellent TV and Print coverage.

Under new business Mike N8FWD suggested that we offer amateur testing after the regular meetings. Dick K8TPH made motion to adjourn seconded by Steve KD8HBR. Motion passed.

VOACAP MUF



Most commercial station that wish to accomplish communications over a given distance must figure what would be the MUF (Maximum Usable Frequency) at a particular time of the day. The VOA (Voice of America) uses a program known as VOACAP. VOACAP is a **radio propagation model**, known as the *Radio Wave*

Propagation Model or the *Radio Frequency Propagation Model*, an empirical mathematical formulation

for the characterization of radio wave propagation as a function of frequency, distance and other conditions. A single model is usually developed to predict the behavior of propagation for all similar links under similar constraints. Created with the goal of formalizing the way radio waves are propagated from one place to another, such models typically predict the path loss along a link or the effective coverage area of a transmitter. As the path loss encountered along any radio link serves as the dominant factor for characterization of propagation for the link, radio propagation models typically focus on realization of the path loss with the auxiliary task of predicting the area of coverage for a transmitter or modeling the distribution of

signals over different regions. Because each individual telecommunication link has to encounter different terrain, path, obstructions, atmospheric conditions and other phenomena, it is intractable to formulate the exact loss for all telecommunication systems in a single mathematical equation. As a result, different models exist for different types of radio links under different conditions. The models rely on computing the median path loss for a link under a certain probability that the considered conditions will occur. This is a very useful tool that can be used by Amateur Radio or SWL (Short Wave Listeners) use to determine what would be the MUF from your location to other locations through out the world. To just plug in the Longitude/Latitude and get the MUF (Maximum Usable Frequency) go to: <http://www.voacap.com/prediction.html>. For the complete program if you are interested go to: <http://www.voacap.com/>

Radio Amateur's spectacular English Channel crossing



In a scene reminiscent of the animated movie 'Up', Radio Amateur **Jonathan Trappe, KJ4QV** tied himself to 54

helium balloons and floated across the English Channel.

Tied to an assortment of red, green, yellow, blue and white balloons the Radio Ham flew from a field at the Kent Gliding Club, near Ashford, and landed in a farmer's vegetable patch a few miles from Dunkirk.

Although he was thousands of feet in the air, he could still hear the waves far below as they crashed upon the shore.

The 36-year-old from North Carolina was also able to quietly admire the white cliffs of Dover as he soared silently above them.

For Mr Trappe was suspended by nothing more then 54 helium filled balloons as he made his historic voyage across the English Channel.

After checking he had not crushed too many lettuces, Mr Trappe let himself enjoy the experience of becoming the first "cluster balloonist" to cross the 22-mile Channel.

Big win for Delaware's amateur radio operators

A big win for mobile ham radio operations in Delaware. This with word that, in a unanimous vote, both houses of that states legislature passed an amendment to a Delaware house bill that outlaws mobile use of 'two-way communication' devices, but now specifically allows amateur radio use. The original wording of the state's cellphone law would have

also banned all sorts of two-way radio operations as well. But State Representatives Ruth Briggs King and Dave Wilson recognized the deficiencies in the wording and introduced an amendment to correct them. It then became the work of the Delaware ham community to assure its passage.

According to a public posting by Dennis Karol, KB3MJ, on the QRZed.com website, some 15 Delaware amateurs not only wrote, called and emailed to their state Representatives and Senators, but actually spent endless hours at Legislative Hall in Dover on Tuesday and Wednesday nights. They spent that time educating legislators about radio communications in general and amateur radio in particular.

In the end, the amendment passed with yes votes from 100% of the Representatives and Senators who were present in both Houses.

FCC Docket RM 10-124

The FCC has adopted a Report and Order on Docket RM 10-124 that contains new and less stringent rules regarding employee participation in emergency communications training drills.

Specifically, the FCC is to amend the Part 97.113 of its rules to permit amateur radio operators to transmit messages for their employers under certain limited circumstances. This includes both government or non-government sponsored emergency and disaster preparedness drills, regardless of whether the operators are

employees of entities participating in an exercise.

Under the newly modified 97.113, the amount of time employees are now allowed to participate in government sponsored drills is essentially unlimited. In the case of non government sponsored drills the limitation is one hour a week and two drill sessions of up to 72 hours per year.

In making its decision, the FCC categorically refuted all comments against the rules modification. The FCC essentially stated that improvement in the public's welfare by allowing such participation in emergency training outweighs any concern within the ham community that such a rules change would erode the non pecuniary interest and not for profit status of the amateur radio service.

The Report and order was released on July 14th. It should become effective 30 days after publication in the Federal Register.

The full document is on the FCC website at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-124A1.pdf or http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-10-124A1.doc

Cody Anderson

2010 Amateur Radio Newsline Young Ham of the Year



Cody Anderson, KI4FUV, a 17 year old radio amateur from Harriman, Tennessee, whose quick thinking likely saved the life of a downed runner in a 2009 marathon, has been named as the 2010 Amateur Radio Newsline Young Ham of the Year. This marks the 25th anniversary of the Young Ham of the Year Award program.

Cody is the son of Benny Anderson and Jane Ann Edwards. He is an honors graduate of Rockwood High School in nearby Rockwood, Tennessee.

At age 11, Cody became interested in radio communications after hearing a VHF ham QSO on a scanner. He was encouraged by his grandparents and stepfather to pursue this interest, and was directed to an Oak Ridge, Tennessee club where he first tested for his Technician ticket in June 2004. He upgraded to General in June 2007 at the Buck Toms Scout Camp run by the Great Smoky Mountain Council.

ARRL West Virginia WVSARC State Convention AUGUST 21, 2010

Jacksons Mill, Weston, WV
Saturday draft Schedule:
<http://www.qsl.net/wvsarc/>
7:00 AM through Midnight Tables
Free - "first come" Lodging and
Meals available. Stay on site from
Friday evening dinner through
Sunday breakfast and enjoy a
quiet and fun weekend meeting
other "Hams" you talk with on-the
air.

Contact: Ann Rinehart KA8ZGY
ka8zgy@arrl.net

Was It Worth It?

From Here to the Moon and Back
**LUNAR LASER
RANGING**

When Laser Ranging began it was known as Lunar Laser Ranging. Lunar Laser Ranging (**LLR**) is the only means available for testing Einstein's Strong Equivalence Principle, on which general relativity rests. **LLR** also provides the strongest limits to date on variability of the gravitational constant, the best measurement of the de Sitter precession rate, and is relied upon to generate accurate astronomical ephemerides (*a table showing the positions of a heavenly body on a number of dates in a regular sequence.*) **LLR** is poised to take a dramatic step forward, enabled both by detector technology and access to a large-aperture astronomical telescope.



Lunar Laser Ranging (LLR) has a distinguished history dating back to the placement of retroreflector arrays on the lunar surface by the Apollo 11 astronauts. Additional reflectors were left by the Apollo 14 and Apollo 15 astronauts, and two French-built reflector arrays were placed on the Moon by the Soviet Luna 17 and Luna 21 missions.



With the experiments with Lunar Laser Ranging the technique was developed in what is now called Satellite Laser Ranging (SLR), used to track Satellites and the development of the GPS, Satellite TV, Satellite Communication, Observation Satellites from which

we obtain our modern weather predicting. **SLR** determines just where to situate Spy Satellites for our protection and national defense against World Wide Terrorism. Have you ever tried to communicate using Laser or a simple Light communications? <http://www.modulatedlight.org/> or <http://www.nr6ca.org/laser.html>

Vanity call sign fees to decrease August 17, 2010

On July 19, the Federal Communications Commission announced via the Federal Register that the cost of an Amateur Radio vanity call sign will decrease 10 cents, from \$13.40 to \$13.30. The new fees take effect 30 days after publication, making August 17, 2010, the first day the new fee is in effect. In FY2010, the FCC expects to grant 14,800 vanity call signs, bringing in \$196,840 from the vanity call sign program. Earlier this year, the FCC released a Notice of Proposed Rulemaking and Order (NPRM), seeking to lower the fee for Amateur Radio vanity call signs. The notice in the July 19, 2010 edition of the Federal Register -- entitled "Assessment and Collection of Regulatory Fees for Fiscal Year 2010; Final Rule" -- includes all FCC regulatory fees; these fees are expected to recover a total of \$336,712,213 during FY2010, encompassing all the Services the FCC regulates. The FCC is authorized by the Communications Act of 1934, As Amended, to collect vanity call sign fees to recover the costs associated with that program. The vanity call sign regulatory fee is

payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new 10 year term.

OLD IS WHEN

You finally reach the top of the ladder and find it leaning against the wrong wall.

SJARA Tuesday Night Net

147.210 MHz PL tone 103.5 July, 2010

Sessions	4
Total Check-ins.....	26
Total time.....	60 mins
Traffic.....	0