

# The Feedline

OLUME 13 ISSUE 5

MAY 2013

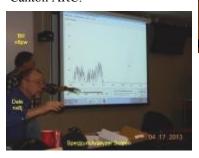
#### SETTING UP SSB TRANSMIT AUDIO

Many hams know that adjustments to their SSB audio can have a direct effect on transmitted power.



Modern radios typically have a monitor function which allows the operator to listen to his audio output through headphones, however, the most accurate method to judge any adjustments involve a second radio receiver.

Routing the audio output, of a companion radio into a computer soundcard will allow the use of an audio spectrum analyzer. This software will produce a live graph of the audio signal strength and show the frequency components of the signal. This method was demonstrated during the April 17th meeting of the Canton ARC.



Photos for this story are by Ted Armstrong K8TWA

The overhead projector was used to allow all 17 hams in attendance to visualize the spectrum analyzer in action as the presenter, Bill (N8PW), demonstrated the effects of various adjustments.

Initially, all audio processors were disabled on the transmitter. The microphone gain was increased to a level intense enough to produce distortion, which was visible on the graph and audible in the second receiver. (Yes, dummy loads can be effective antennas at short distances).

Once the operator, using their normal voice and microphone of choice, finds the level of distortion, the gain can be slightly reduced to provide a clear audio signal. At this level you can be confident that you transmitter will provide full output, on voice peaks.



The spectrum analyzer can be used to witness the effects of audio shaping and processing as well. The effects of speech compression were clearly visible on the screen as various levels were switched in and out.

The frequency component of transmitted audio can be adjusted as well and is clearly represented in the display.



Weak signal or DX contacts will benefit from forcing the energy of the lower voice frequencies into a higher tonal range. Properly adjusted audio will assure many more contacts during field day in June.

Following the short demonstration, several members stepped forth to make adjustments on their own and witness the real time effects. Perry (N8VXQ) found this program helpful as he is setting up a new home station. The program used is a v a i l a b l e free a t www.techmind.org.



A slideshow of larger photos will be on the website soon.

Left to right: Jim Manson (KA8JIM) and Les Myers (KK8K) at K8TWA's shack.



Les Myers (KK8K) At the EOC shack.



Les Myers (KK8K) At K8TWA's shack

# STARK COUNTY VHF QSO PARTY

This article is by John Myers, KD8MQ. It appears courtesy of the Alliance Amateur Radio Club.

April 6th was the Alliance ARC's latest running of the Stark County VHF QSO Party. In my opinion, it was the best one so far, with pileups noted on some frequencies. There was some inadvertent doubling of calls, but it happens at times.

The purpose of this contest is to:

Provide an opportunity for local Amateurs to enhance their stations and operating skills.

A lot more is learned about VHF propagation by operating simplex than can ever be discovered by working repeaters. It also points out why the ½ wave mag-mount stuck to your home A/C unit may not be the best setup for your VHF station.

Simulate emergency conditions (with NO repeaters).

It's pretty simple to call a friend 20/30 miles away on VHF when the repeater systems are functional. However, not so when the repeaters are down. An exercise like this can be a real eye-opener.

To enhance utilization of the 2 meter band and simplex operation

And utilize it we did! It is good to occasionally remind everyone that there are more frequencies on VHF FM than just repeater pairs.

To have fun.

What can I say about this one? I had fun, and from the phone calls, and e-mails I've received, so did the rest of you.

One of the phone calls I received touted, among other things, the cooperation that exists between the three Stark County clubs. This contest is just one example of that cooperation. Thanks to both the Canton and Massillon clubs, for their cooperation, and participation.

Also, there were a number of stations sharing a limited number of simplex frequencies, but I heard no disagreements. We all managed to work & play well together. Now if we could just manage to expand this to the ops on HF.

The object of the contest was to contact as many Stark County,OH stations, in as many different cities, villages, and townships as possible. I don't yet know how many multipliers were activated, but I bet we came close to full activation. I'm looking forward to receiving everyone's logs.

We'll soon be getting together for a debriefing, to see what needs to be tweaked for next year. If anyone has any ideas, or suggestions for the 2014 contest, please forward them to me at kd8mq@arrl.net.

#### MAY HAPPENINGS

### A Technician Class is forming. Contact Bill Hannon (N8PW) at 330.454.7793 for more info, time and location.

May 8th, Wednesday

Special Meeting - Field Day Planning, EOC Meeting Room at 7:30 PM

May 11th, Saturday

Amateur Radio Exams at the EOC Meeting Room, Registration 8:00 AM Testing 9:00 AM

May 11th, Saturday

Breakfast Club, Blue Fig Restaurant, North Canton at 8:30 AM

May 12th, Sunday

Mother's Day - DO WE REALLY NEED TO REMIND YOU? Don't forget the YL or the XYL.

May 15th. Wednesday

Regular Meeting - Logging Programs, EOC Meeting Room at 7:30 PM

May 17th, 18th, & 19th

Annual Dayton Hamvention at the Hara Arena at 1001 Shiloh Springs Road in Dayton, Ohio.

Check their website at: www.hamvention.org

The Pioneer Amateur Radio Fellowship, Akron, Ohio, <a href="www.qsl.net/w8ctt">www.qsl.net/w8ctt</a> is sponsoring a Bus Trip to Dayton. The official deadline has passed but there may be seats available for \$50.00 round trip. For additional information contact: Joy Spencer (KA8TDF) at 330.745.5115.



#### May 25th, Saturday

Club members and friends that belong to the QCWA Chapter #21 can attend the 50th Anniversary Dinner Meeting. Nelson (W8EAR) will provide the time and location details at: <a href="http://www.cmh.net/~jpvsr/May2000.html">http://www.cmh.net/~jpvsr/May2000.html</a>

May 27th, Monday

Memorial Day

Remember the Veterans who made the ultimate sacrifice for our freedom by decorating a soldiers grave.

In the One-More-Thing Department - Please check our club website as it has changed several times in the last month or so at: <a href="www.w8al.org">www.w8al.org</a>. Please pay special attention to the Membership page to verify your name and email address are correct. If there is a problem with a listing, or you do not see your name listed there (and you are a member), please email us at the following email address: <a href="www.webmasterw8al.org">webmasterw8al.org</a> so we may make the necessary corrections.

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	U J H			

SUNDAY Massillon Radio Net	CW	7:30 PM EST 8:30 PM EDT	3599.5 LSB	
MONDAY Cuyahoga Falls ARC	FM	8:30 PM	147.270	
TUESDAY Stark County ARES Net	FM	7:00 PM	147.120	
(Last Tuesday of the Month for the Homela Homeland Security Net	FM	8:00 PM	147.51Simplex	
Massillon Radio Net	CW	7:30 PM 8:30 PM EDT	3599.5	
WEDNESDAY				
Carroll County ARS	FM FM		147.075+ Changes w/DST	
Wayne Amateur Radio Club	FM	9:00 PM Winter	147.21+ PL=88.5	
THURSDAY				
Alliance ARC Nets	CW SSB	8:00 PM 8:30 PM	28.400 28.400	
Lake Erie ARA	FM FM FM	9:00 PM 8:00 PM	145.370 146.760	
Portage County Amateur Radio Service West Stark Info Net	FM	8:00 PM 8:00 PM	146.895 147.180	
Wooster Amateur Radio DX Group	FM	8:00 PM	147.345 (PL=110.9)	
Massillon Radio Net	CW	7:30 PM 3599.5 8:30 PM EDT 7:30 PM EST		
FRIDAY				
(Except for the first Friday of the month.) West Stark County Info Net	FM	8:00 PM	147.180	
DAILY (or Almost)				
(The two nets below do NOT roll on Sunday Silvercreek ARA Barometer Net Stark & Surrounding County Net	y.) FM AM	7:30 AM 7:00 PM	147.390 50.400	
If you do not see YOUR net listed please email us so we can add it to our list.  Email: webmaster@w8al.org				



#### THE DX PAGE

CT1FTR will be in Khartoum, Sudan until June. He is signing ST2FT. QSL as directed on the air.

AC6DD will be active stroke 9A from Sveti Nikola, Croatia. This during the RSGB Islands on the Air Contest on July 27th and the 28th. If you make contact QSL via AC6DD.

KT3Y, K9VV and WP2XX will be active from the KP2M rental shack on St. Croix Island during the CQ World Wide WPX CW Contest from May 25th to the 26th as a Multi-Single entry. QSL direct only via AI4U or Logbook of the World. No QSL's will be accepted via the bureau.

ZL1GO and ZL3CW reportedly will use the call sign N8A during their American Samoa operation between November 12th and the 26th. More information on this upcoming operation as soon as it is made available.

Word has it that Portuguese amateurs will be operating through the end of the year with the call CS250CLE. This to celebrate the 250th anniversary of the final construction of the Torre dos Clerigos bell tower of the Church of Clerigos. Since its completion the tower has overlooked the city of Porto as the highest bell tower in Portugal. If you make contact CS250CLE please QSL via CS5RPT.

Look for special event call sign TM28UFT to be active during the 28th annual meeting of the French CW Society which will be held in Panazol Center, France, through April 21st. Activity will be on the HF bands and possibly others for this Morse only operation. The QSL Manager is F9IE. More information is on-line at www.uft.net. (UFT.net)

GM0OBX will be running the special event call of GB1PC during April from Stirling and District Amateur Radio Society in the United Kingdom. This to celebrate the new Police Service of Scotland. Please QSL to GM0OBX either direct or via the bureau.

IK2GZU will be in the southern region of Tanzania through May 8th working on electrical installations at the local hospital and orphanage. He hopes to find time to erect a 3 element yagi and operate as 5H3MB. If you make contact, please QSL via his home call.

SN0MD to be active in celebration Poland's 40th Debno marathon. Operation of this station continues through April 22nd. QSL via SP1PNW.

RW3AH is currently on the air from Egypt as SU9AF. He's reportedly operational on all of the HF bands. QSL via UA3DX.

The Northern California DX Foundation has announced a grant of \$50,000 to the upcoming FT stroke Z Amsterdam Island DXpedition currently planned for January and February of 2014. This is the second largest grant in the history of the Northern California DX Foundation history. Amsterdam is number 4 on the DX Magazine's Most Wanted List of rare DX locations for 2013. Check <a href="https://www.amsterdamdx.org">www.amsterdamdx.org</a> in the near future for more DXpedition details. (NCDXF)

If you would like to see a DX report that is updated weekly go to: http://sunset-empire-arc.org/index\_files/Page626.htm



### CODE TALKERS OF WWII HONORED

The Lawton, Oklahoma Fort Sill Amateur Radio Club will be hosting a special event station from May 8th to the 11th at the Comanche National Museum in Lawton, Oklahoma. This to commemorate the work of the Comanche Code Talkers of World War II.

According to Wikipedia, the Code talkers were people who used obscure languages as a means of secret communication during wartime. The term is now usually associated with the United States soldiers during the world wars who used their knowledge of Native-American languages as a basis to transmit coded messages.

There were approximately 400 to 500 Native Americans in

the United States Marine Corps whose primary job was the transmission of secret tactical messages. Code talkers transmitted these messages over military telephone or radio communications nets using formal or informally developed codes built upon their native languages. Their service improved communications in terms of speed of encryption at both ends in front line operations during World War II. (KC5FM)

If you saw the motion picture with Nicolas Cage about the subject and found it interesting you should delve into the story about the <u>real</u> heroes.





### HOW IS YOUR Radar???

Will you accept the RaDAR-Program Challenge?

The RaDAR Program is aimed at promoting the use of Rapidly Deployable Amateur Radio stations and is for all licensed radio amateurs. The points system is structured to encourage portable operation, especially pedestrian mobile stations.

More info is available here: http://radaramerica.blogspot.com/2013/04/theradar-challenge.html ...and RaDAR has now also come to Google+

Look for the Google+ community Rapidly Deployable Amateur Radio (RaDAR). The community is for sharing RaDAR ideas and photos but access is not required to participate in the challenge.

73 de Marcus KD0JKM

If this idea intrigues you, please check out the website for the group HFPack. I am a member

of the group since I am often wheelchair portable and it is a great way to operate. I have added red-black cable with Anderson connectors for both batteries in my powered wheelchair and it is very easy to go ham it up whenever I choose.

The HFPack folks can be found at: http://hfpack.com/

Even if you do not want to operate man portable you can listen to popular HFPack frequencies and talk to the pedestrian mobile crowd.



#### WA. SCOUT EVENT A HUGE SUCCESS

A ham radio related Youth Workshop was held on Saturday, April 13th at the Lake Washington Institute of Technology in Kirkland, Washington.

The event is being hailed as a huge success. This was all thanks to the very hard work of the amateur radio support team at the event.

According to planners, there were over 100 Electricity, Electronics and

Radio Merit Badges completed by the 58 youngsters who were registered at the event.

These are considered Science, Technology, Engineering, and Mathematics known as STEM Merit Badges and part of the STEM/NOVA Award sponsored by the Boy Scouts of America.

There were 14 adults and 14 scouts that qualified for their amateur radio

licenses during the event. Five of the adults were Scout Masters. Some of the others were from various scout troops and the Lake Washington Ham Club. Another event of this type is in the planning stages for September 14th. of 2013. Story by N7DRW, K7APS and AE7TD via K9JA.

I can see an Eagle Scout Court of Honor on its way for these diligent scouts.

#### 75TH ANNIVERSARY OF 1ST CLASS CW OP CLUB

To commemorate the 75th anniversary of the First Class CW Operators Club (FOC) during the month of May, the organization is holding a month-long, on-air event featuring more than 20 special FOC suffix calls. This will include GB75FOC which is a special anniversary call sign for their club station.

GC4FOC will be used when operating from Wales, GN4FOC from Northern Ireland, GP4FOC from Guernsey, GS4FOC from Scotland, and GT4FOC from Isle of Man). A list of who is on the key of each special UK call each day can be found <a href="here">here</a>. There will be many other FOC calls on the air all month from outside the UK, including some exotic locations such as 4X, 5B, 5T, 7Q, A6, HZ, KH6, V3 and VQ9. I am smelling the DX brewing now.

There will also be other FOC call signs operating from the USA and Canada as well as some exotic locations such as VQ9, HZ1 and 5T. Stations will gain points for contacting any First Class CW Operators Club member and a certificate will be presented to stations who reach certain point levels.

Founded in 1938 with its roots, history and management in the United Kingdom, the First Class CW Operators Club promotes good CW operating, Morse activity, friendship and socializing via its worldwide membership of approximately 500. Complete details of the group and this event is on-line at <a href="https://www.tinyurl.com/first-class-morse">www.tinyurl.com/first-class-morse</a>.

Members are active on all HF bands and the character of the club is best expressed in its motto. "A man should keep his friendship in constant repair" - Samuel Johnson (1755)

#### Club Frequencies

 $3525,\,7025,\,10120\text{-}10125,\,14025,\,18080\text{-}18085,\,21025,\,24905\text{-}24910\text{ and }28025\text{ kHz}$ 

We know of one club that has Morse code audio that plays on their Home page. Turn up the volume on your speakers and check it out at: <a href="http://www.sunset-empire-arc.org">http://www.sunset-empire-arc.org</a>. It is only 15 wpm. Read the code and send them an email. They would *love* to hear from you!

### SATELLITE DX - YOU GOTTA LOVE IT!



This story is about a 7330 km (4,554 mile) contact on FO-29. On Monday at 1338 UT Hector Martinez (CO6CBF) achieved a 7330 km contact on the amateur radio satellite FO-29, the furthest he has worked and close to the theoretic maximum for the satellite.

Hector, who is in grid square EL92sd, worked David, EA4SG in IN80cp using SSB. He was equipped with a Yaesu FT-817ND transceiver, 30 watt power amplifier, and a homebrew Arrow antenna with a homebrew, mast mounted amplifier. Everything was powered by two, 12 volt, 7 amp gel-cell batteries. Hector operated from the top of a tall building which improved his horizon visibility toward Europe.

Hector says "We had just an 88 second window. Satellites are always fascinating! Thanks very much to David for this great contact and new grid!" Hector is looking for other FO-29 contacts in the UK and Europe. His email address for skeds is: <a href="mailto:co6cbf">co6cbf</a> at frcuba.co.cu

FO-29 info: <a href="http://amsat-uk.org/satellites/fuji-oscar-29-jas-2/">http://amsat-uk.org/satellites/fuji-oscar-29-jas-2/</a>

This was not just a long distance QSO it was the very first Cuba to EI contact on FO-29 <a href="http://amsat-uk.org/2013/04/04/6955-km-contact-on-fo-29/">http://amsat-uk.org/2013/04/04/6955-km-contact-on-fo-29/</a>



### **G100RSGB ACTIVE ON SATELLITES**

Flight Refueling Amateur Radio Society (FRARS) was active on the amateur radio satellites on Thursday, April 4 using the special event call sign G100RSGB.

On one pass of the satellite FO-29 FRARS club member Clive Lambert-Hutchinson (G7SVI) had arranged a schedule with Hector Martinez (CO6CBF) in Cuba. He is the young man in the article above. This was on the extremes of range for the satellite and there was only a brief window of about 1 minute when the two stations could make contact. A signal believed to be Hector was heard but wasn't strong enough for a contact.

FRARS hosted the RSGB Centenary Call G100RSGB from their well equipped club house at Merley, Wimborne, Dorset, BH21 3DA and were active on all bands from 1.8 – 440 MHz. The day was a great success with the club members operating three separate stations continuously during the day.

Check out the Flight Refueling Amateur Radio Society (FRARS). http://www.frars.org.uk/

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#### SMARTPHONE TO HAM RIG DOCKING STATION

A new, multi-band, two-way radio/smartphone device has neen announced. The Alianza project has created an innovative docking case, which allows you to dock any iPhone, Android, or Blackberry smartphone and transform it to a self programmable multi-band two-way radio with RoIP repeater capabilities. The company has just released the device on kickstarter at <a href="http://kck.st/YXr17Y">http://kck.st/YXr17Y</a>. They code named the device the Alianza DxB.

The Alianza DxB's features include:

- 1. Innovative amateur radio gear The DxB is the world's first docking case which allows you to dock your smartphone turning it into a two-way radio. Unlike Nextel, this device can communicate with other two-way radio and smartphones without an app. Sounds tasty.
- 2. Made for amateur radio guys The DxB allows you to communicate to any two-way radio when out of range of cellular coverage. Plus its built-in battery helps recharge your phone and its rugged case helps protect it.

The company launched the new product on Monday, April 15th.

www.alianzahd.com



#### THE ILLW REACHES A NEW MILESTONE

The honor of being the 200th registrant in the International Lighthouse and Lightship Weekend in August, goes to the Whitby High Light GB2WHL in England.

The special event station GB2WHL, by the Denby Dale Radio Club, is on the North Yorkshire coast near the historic fishing town of Whitby - well known as the place Captain James Cook became a seaman before leading his epic voyages of discovery.

Built in 1858 the lighthouse helped ships avoid the Whitby Rock, close to the harbour entrance.

The lighthouse, now on private grounds, is reached with its owner's permission via narrow roads. A special QSL card is available on request.

So far there are registrations from 29 countries. To read the guidelines for the International Lighthouse and Light-ship Weekend on August the 17th and 18th, or to register online a lighthouse, lightship or maritime beacon, visit the website at <a href="www.illw.net">www.illw.net</a> Mark you calendar. We should be able to snag some great and unusual DX during this weekend.

Jim Linton VK3PC



#### NON HAM CITED FOR INTERFERENCE

The ARRL reports that the FCC has issued a Citation and Order to Ruben D. Lopez Jr. of Pomona Park, Florida.

The citation, which was issued on April 23rd, is in response to several complaints about a water well pump located at the Lopez residence. The pump was acting as an incidental radiator and causing harmful interference to local radio amateurs.

Per the citation, in October 2012 and in response to another interference complaint, agents of the FCC DF'd the area to find the offending equipment. Mr Lopez's water well pump was determined to be the source of the transmissions

on the frequency of 1800 kHz

Lopez was found to be in violation of Section 15.5(b) and (c) of the FCC's rules by operating an incidental radiator and causing harmful interference.

He was instructed by the FCC to "take immediate steps to ensure that he does not continue to cause harmful interference, including repairing or replacing his well pump and associated control circuitry."

The FCC advised Lopez that if he continues to violate the Communications Act or the FCC's rules, it "may impose monetary forfeitures of up to \$16,000 for each such violation, or in the case of a con-

tinuing violation, up to a maximum forfeiture of \$112,500 for any single act or failure to act.

Additionally, violations of the Communications Act or the FCC administrative rules can result in seizure of the equipment through forfeiture actions, as well as criminal sanctions, including imprisonment.

You may read the full ARRL story at:

http://www.arrl.org/news/florida-man-cited-for-causing-harmful-interference-to-radio-amateurs

Just click the link above on this on-line newsletter and away your browser will go.

#### ANOTHER SAT COMES BACK TO LIFE

Another communications satellite that had been given up for dead has come back to life.

The most recent surprise came when India's first IIT made student satellite, named Jugnu which had been built by the students and staff of IIT-Kanpur.

The Times of India reports that the three kilogram (6.6 lb.) student satellite was launched on October 12th

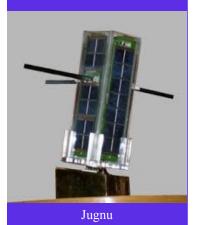
with SRMSat of SRM University in Chennai and VesselSat-1 of Luxembourg. The main satellite was the Indo-French Megha-Tropiques

Speaking to TOI from Kanpur on Friday chief coordinator of Jugnu, NS Vyas, said that the mission life of the satellite was one year. "We had stopped tracking it. But when we came to know from the Nitte Amateur Satellite Tracking Centre in Bengaluru that it really was after still alive we were thrilled," he said.

Vyas said that while its signals were still strong, some of its internal functions had weakened or failed

Read the full Times of India newspaper article at:

http:// timesofindia.indiatimes.com/ india/Dead-satellite-comesalive/ articleshow/19642509.cms



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#### HIGH SCHOOL RADIO DAY

High school ham radio stations in the United States came together April 24th for High School Radio Day 2013. Following the inaugural event last May, a website was created at <a href="www.highschoolradioday.com">www.highschoolradioday.com</a> to publicize the activities planned by participating stations. The day's activities will include live broadcasts from different high school stations around the country streamed on the High School Radio Day website. There also will be links to station streams and schools can register with a link to their own station website.

High School Radio Day was created following the successful launch of College Radio Day in October of 2011. Founder Pete Bowers, the station manager of WBFH-FM in Bloomfield Hills, Michigan decided to hold High School Radio Day last year on May 16th because it is the anniversary of the first U.S. high school radio station WNAS-FM in Albany, New York's inaugural broadcast in 1949. Organizers of High School Radio Day 2013 hope that this gathering will raise the profile of the limited number of high school radio stations still operate in the United States. Is your affiliated school club ready for next year? Let's start planning for it at the next meeting.

### YAESU FT-400DR DIGITAL DUAL BAND MOBILE

**REALLY BIG NEWS** in the world of <u>digital</u> VHF and UHF voice communications. The Yaesu FTM-400DR dual band mobile transceiver has received FCC approval, but the date when it will be available for sale has not been announced.

According to the Universal Radio website, the new 2 meter and 70 centimeter radio is power selectable at 50, 20 or 5 watts on either band, features wide band receivers covering 108-470 and 800-999 MHz minus the cellular band four scan modes and 500 memories per band and all the other bells and whistles you would expect in a top of the line, dual band rig. But it's Kevin Sanders Amateur Radio and Scanning Blog adds that reveals the most important aspect of this new rig. **That of it being capable of full C4FM FDMA digital voice operation as well as conventional FM.** This means it will be the base and mobile radio that will compliment Yaesu's long waited FT1D digital voice hand-held.

How much will the FTM-400DR set you back? At airtime there is no manufacturers suggested price listed. All the Universal Radio website says is the information shown is preliminary and may be subject to change without notice or

obligation. You can take a look at the new Yaesu offering at <a href="https://www.tinyurl.com/yaesu-digital-mobile">www.tinyurl.com/yaesu-digital-mobile</a>. A video of the radio taken at last years Tokyo Hamfair can be seen at <a href="https://www.tinyurl.com/ftm400">www.tinyurl.com/ftm400</a>.

or

Watch the video at this link. <a href="http://youtu.be/Ipg5pkYuzjk">http://youtu.be/Ipg5pkYuzjk</a>

How do you like that big display on the remote head?

No, it is not DStar compatible, Wow! Betamax vs VHS all over gain.



# Communication Tip of the Month

#### "Lead With Liking"

Who are you struggling to influence? Your boss? Your co-workers? Your clients? Perhaps someone you live with? When I am asked for advice on how to influence others, the first thought that comes to mind is find a way to like them.

Take a moment and look at it through your own eyes. When someone is coming to you and trying to influence you, does it make a difference to you whether they have a basic like for you rather than a dislike? It does for me. When someone approaches me with a critical and judgmental eye, I'm much more likely to steel myself against their influence. When I get the impression that they appreciate me to some degree I am much more likely to hear them out and entertain what it is they are trying to ask me to do.

I am hired to help people communicate more effectively with one another. The work can be quite challenging. Sometimes I am astonished at seeing the way people treat each other. The question is, do I steel myself to go to work and face problematic people? Or do I remind myself that these are people who despite their defensive behaviors, want to be valued, accepted and supported? I find it tremendously useful to start off my day from a liking perspective. It puts me in a better mood, I enjoy working with them and they are more open to what I have to offer. That is the foundation for positive influence.

One of my former clients wrote to me recently about how much he appreciated the advice to lead with liking. When we last talked, he had been struggling with an individual in his organization. He said, "I believe I am more open and humble when I approach interactions with a lead with like mentality...it's the appeal of a clean slate that makes this approach so helpful for me. Hopefully, that's what I'm projecting as well. The sense that, in this moment, we can have the most positive, productive engagement possible without any 'ghost of the past' hanging over us."

If you have someone in your life who is challenging for you, please consider:

Getting to know the whole person ... their personal story, what they are striving for, what they are most proud of and what their fears are.

Identify a compelling reason to like them in at least one aspect.

Remind yourself to lead with liking when you need to converse with them

Be patient, it might take them time to realize that you are genuinely approaching them differently than you have in the past.

If you find yourself questioning the value of these suggestions, take a moment to think about someone who doesn't hold you in high regard. Would you appreciate if they saw you as a whole person, recognized your likeable qualities and started each conversation with a clean slate? I know I would.

Patti Lind www.pattilind.com



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### THINK LANDLINE PHONES ARE OUT?

#### "What Happened to The Duplex Telephone Call?"

I recently had a discussion on carrier telephony and various philosophical constructs with and old friend, Mr. Dave Platek. The conversation was a priceless interaction that I'll always treasure. Somewhere into it he mentioned: "Do you remember the old days of arguing with someone on a POTS line? Ahhh the beauty of it. Plain old twisted pair copper wire. FULL DUPLEX capability over a DC carrier. Analog signals all the way. Do you remember this?". What a great question. Yes, I do. I think it might have shaped a culture and impacted behaviors substantially. If you were winning the argument, you could restate your thesis WHILE the other side was blabbering. If you were losing, you could make your points LOUDER while the other side was pontificating. It was full duplex interaction. Sadly though as technology marches on, it WAS.

So now we've boldly and proudly evolved and rabidly purchased the latest and greatest do- all pocket cell phone gizmo.....and IT'S SIMPLEX. You can't do the stuff you did forty years ago on a copper backbone. You can't have an interactive duplex argument. Sure the 'virtual, implicit PTT button' is coded into some wonderful CODECS and whatnot.....but it's still SIMPLEX. On occasion, when nobody is texting, surfing, facebooking or blogging and the cell site is lightly loaded you can get a syllable or two duplex....but then you have to either talk or wait for the other party to get going. Terribly awkward yet sweepingly accepted and idolized. Why? What was so bad about duplex? It happens in live conference rooms and other real human interactions all the time!

Why did we assimilate this awkward simplex mode of communication? If I wanted simplex, I'd build a walkie-talkie. With the equivalent of yesteryears supercomputer in my hand sipping power from a 3.6V Li-Ion battery...I can only talk simplex? I can transfer money in microseconds, discover whether or not I'm related to squirrels in nanoseconds, google a pothole in the road in milliseconds, send fabulous pictures in nearly no time.....and I have to WAIT for a retort if I'm arguing with somebody on this gadget? Worse yet, I have to PAUSE? With all that capability, all of those MIPS, all of that mind numbing speed, it seems really odd that a POTS line from 1972 would offer more functionality on a phone call.

Maybe in a different wormhole, Watson and Bell had their first conversation on a 'modern doo-dad' and when Bell said "Watson, come here, I need you"....Watson said "NO man, I'm busy" partially through Bell's command....but it was never heard and it blanked the rest of Bell's syllables waiting for the software to vote in the guy that was talking. Wouldn't that be awkwardly uneventful?

I cannot refute the data rates, speeds and capabilities offered by the modern cell phones...they are breathtaking in that regard.....but at the same time, I don't think we should put duplex voice communication in the Smithsonian. There's something about interjecting DURING someone else's misinformation or fumbling that is magical. Or perhaps simply voicing a collective agreement. When the telemarketer illegally calls my cell phone and says "good morning mr Shir-boppen-hy-mole, I'd like to sell you blah, blah, woof woof" with DUPLEX communication I can interject "get the name right doofus" in his mid, scripted, poorly-read sentence and listen to the syllables fade as he logs a 'no sale'. In SIMPLEX I interject similar....wait for the pause to clear....then listen close to hear whatever came after what he might have heard or done. I might as well be talking to the mars rover!

Thanks Dave for bringing up this fine point of conversation and our materially hastened acceptance of lesser performance from a doo-dad as part of our purported forward evolution.

Perhaps someone in the design community can shed some light on why a POTS line from 1972 offered better voice communication than our high-tech, modern gadgetry.

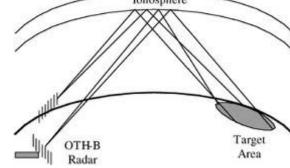
By Paul L. Schimel PE, with much influence from Dave Platek

#### HF INTERFERENCE

The dreaded and unmistakable sound of OTH (Over the Horizon) Radar is once again interfering with communications on or near several ham radio bands. The latest Region One International Amateur Radio Union Monitoring System newsletter reports a Russian Over the Horizon Radar has been transmitting between 3.555 to 3.590 and 3.750 to 3.785 MHz. The signal is always **35 kHz** wide with its location believed to be in the area of Makhachkala, in the Caspian Sea.

Amateur radio as well as many other services are being interfered with in the evening hours by this annoying signal source. A letter has been sent to the Russian Radio Society -- the SRR -- asking for assistance in ending the operation of this Radar system. Good luck with that.

Meanwhile, an Iranian based Over the Horizon Radar has been interfering with ham radio operations on the 10 meter band. This Radar is on the air daily on 28.000 to 29.700 MHz transmitting bursts that are 60 kHz wide. The splatter from the signal often covers spectrum 500 kHz or more in bandwidth. The German Department of Post and Telecommunications has sent an official complaint to its counterpart in Iran.



You should also note that the Dutch Datawell buoys are still operating illegally on 10 meters. The Datawell Company was informed that the transmissions are illegal by DK2OM and PA2GRU way back in March of 2012, but so far the company has not responded and the interference continues.

### UV-3R IS A HACKERS PARADISE

The Baefong UV-3R has become a hackers paradise.

The tiny and very inexpensive Baefong (pronounced BAY FONG) dual band H-T has developed a big following among the makers and hackers in ham radio. So much so that the DIY site

Hack A Day reports on how you can write new firmware for the UV-3R to make it do things that its developers never thought of doing. You can see for yourself what's going on with this tiny set as the hackers and makers have a literal field day with it at tiny-url.com/uv3r-hack.





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### DIRECTION FINDING FOR BEGINNERS

This video covers beginner's tips and tricks for amateur radio fox hunting/direction finding. It includes details on how to build a DIY Yagi antenna. For those not interested in the ham details you might want to skip to the last 3 minutes starting at time 33:00. In the last 3 minutes of the video 4 young kids go out to rescue the poor lost Easter Bunny and his basket of candy. The Easter bunny is wearing a radio transmitter so this fox hunt becomes an Easter Sunday bunny hunt. The boys did very well and had no problem learning to use a ham radio and directional antenna to locate the lost bunny.

Our fox, aka Bunny, was the Byonics Micro-Fox 15 which is a 15 milliwatt transmitter in the 2 meter ham band. This fox is sold by: <a href="http://www.Byonics.com/">http://www.Byonics.com/</a>

To watch the video "Rescue the Easter Bunny - Ham Radio Fox Hunting for Beginners" click the link below.

http://youtu.be/tQ8gNHAFXXY

#### **WIRELESS LIGHTS POWERED BY HAM RADIO**

James Sanders (AG6IF) has released a short video showing a fluorescent light tube being lit by a 2 meter 5/8th wave antenna. After watching a most excellent "RF Light show" presentation by AA6DD at the Moreno Valley ham club meeting, He wanted to map out my 5/8 wave magnetic mount, using a fluorescent light tube. The 40 watt, 48 inch tubes are still in the plastic wrapper. NO wires needed!!

In the video he uses the simplex frequency 145.520 and a Yaesu FT-2600 acting as the exciter running full power. The antenna is a Cushcraft 2m/440, 5/8 wave NMO magnetic mount.

Voltage is high on the end, and low in the center where the current is the highest. Once you see this video you may find yourself inspired to read up a bit on antenna theory and find out just how currents flow.

Watch Wireless lighting -- ham radio style at this link: <a href="http://youtu.be/SLjkq8ESfS0">http://youtu.be/SLjkq8ESfS0</a>

#### HAM RADIO AT STEM FAIR

As we went to press we had not received permission to reprint the article so we have included a synopsis and a link to the full newspaper story. The Kitsap Sun reports on the part played by amateur radio in the Washington State Science and Engineering Fair. They say Ryan, (age 11) and David (age 10) were among those who discovered the fun of ham radios. These young people are the future of amateur radio. You should watch this video.

Read the full story story at: <a href="http://www.kitsapsun.com/news/2013/apr/06/fair-helps-mold-scientists-researchers-and-of/">http://www.kitsapsun.com/news/2013/apr/06/fair-helps-mold-scientists-researchers-and-of/</a>



### KIT BUILDING

The Four State QRP Group recently introduced a new kit. It's called the "Force Link" but is spelled 4S-Link. It is an interface between your radio and computer for the digital modes. Everything you need in one totally complete kit for only \$40. You can't beat that with a stick! It was designed by Dave Cripe NMØS and if it's like everything else that the Four State QRP Group offers, it will be a home run. I would suggest ordering early before the first run is sold out. If you have been waiting for an inexpensive way to do digital, this is it AND build a kit! What a great hobby we share.

#### **BOEING ANNOUNCES NEW SOLAR CELLS**

Spectrolab, a Boeing subsidiary known for the manufacture of solar cells for satellites and space-craft, has in recent years turned its attention to terrestrial solar cells to tap into the expanding alternative energy market. Now the California-based company has claimed a new solar cell efficiency record of 37.8 percent for a ground-based multi-junction cell without solar concentration.

While Spectrolab and others have achieved higher efficiencies with multi-junction solar cells, these were done using sunlight concentrated by lenses or mirrors onto the solar cells. The company says it was able to set a new record without concentration using a new class of high-efficiency multi-junction solar cell.

Unlike traditional silicon solar cells, multi-junction solar cells contain several different semiconductor materials. The interfaces between these different materials – which are known as p-n junctions – are tuned to different wavelengths of light to increase efficiency.

It hasn't been revealed which materials were used in this case, with the news release stating only that the 37.8 percent conversion was achieved "using a new class of high-efficiency multi-junction solar cell, created from two or more materials and leveraging Boeing technology that makes semiconductor materials more reliable."

The company doesn't intend to rest on its laurels, with Spectrolab's vice president for advanced technology, Nasser Karam saying the company's technology has the potential for efficiencies of more than 45 percent, even under lower concentrations.



Source Boeing, Corp.



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### ARES & THE BOSTON BOMBING

Don't get excited. No hams were injured at the Boston Marathon bombing, but it certainly gives one pause to ponder. As in the past, over 200 amateur radio operators were assigned to the race as an ARES operation. They handled the usual situations that we have seen at our past events such as the Hood To Coast race in Oregon or the Pro Football Hall of Fame week in Canton, Ohio and the usual surprises that Nature can throw at us such as storms, floods, earthquakes, tsunami's, etc.

No one could have predicted that two bombs would explode within 400 feet of the Net Controls trailer. What could have been predicted was that hams would rise to the occasion and perform their vital tasks admirably. Moments after the explosion The Massachusetts State Police ordered that a ham be placed outside the trailer to be on guard.

Immediately after hearing the blast the Net Control began a roll call of all hams and the medical tents. It took only minutes for the cell towers to be completely jammed. No calls and no texts were getting in or out due to the very high level of traffic on the system. Immediately after the bombing Net Control began to compile updates and forward them to the Massachusetts Emergency Management Agency (MEMA) via their web based, Emergency Operations Center (EOC) computer program. After a very few updates the State Police ordered the area to be evacuated.

Along the course and outside of the finish line, after the bombings made it a crime scene, first aid stations were consolidated to form larger stations and runners were gathered for pickup and to stay warm and hydrated. At the Heartbreak Hill first aid station, amateur operators had a complete base station setup, including a computer,. They were prepared to handle health and welfare traffic as required. Several shelters were set up along the route at churches and schools, and extra Amateur Radio operators from the secured first aid stations were sent to those shelters, providing communications until runners were moved out of the locations.

Steve (W3EVE) was assigned to shadow the Red Cross medical tent coordinator and provide communications. Rob Macedo (KD1CY), who is also the Eastern Massachusetts ARES Section Emergency Coordinator. Stated "It was a challenging position but all organizers on both the Amateur Radio side and Red Cross side said things went well in coordinating during normal race conditions and particularly after the bombings."

At Race Course Net Control (which was away from the bombings) ham operators controlled their nets calmly and professionally while also expressing an appropriate level of urgency. Over a dozen amateurs at the net control center pooled together to announce messages and keep status of changes along the course route as required.

"Despite the total lack of warning in this situation, amateurs followed a creed I've long since preached since the 9/11 terrorist attacks and the mutual aid response to those attacks: 'blessed are the flexible for they will not get bent out of shape,'" said Steve Schwarm (W3EVE). "Amateurs on the course did what they had to do to assure their own safety and runner safety working with the Red Cross medical people. They did an outstanding job and I was told so by Red Cross organizers as well." Those are words to live by.

From an ARES perspective, a heightened state of awareness on the Boston Marathon event is typical, but within 15 minutes of the bombings, Eastern Massachusetts ARES Assistant Section Emergency Coordinator, Carl Aveni, (N1FY), issued an ARES Stand-By Notice and requested that amateurs give availability for the next 24 hours. Within minutes, 20 amateur operators offered their availability.

"In terms of having amateurs within ARES who cannot get directly involved in the marathon, we have a process where we have them monitor in case of a situation like what occurred on Monday. That process paid off and facilitated a rapid response to our request for possible additional support," said Aveni.

#### W8AL

#### www.w8al.org

The Canton Amateur Radio Club, Inc. P.O. Box 8673
Canton, OH. 44711

President - William Hannon (N8PW)

Vice President - Dale Lam (NX8J)

**Secretary - Scott Duncan (KK8D)** 

Treasurer - Roger Gray (W8VE)

Trustee - Jerry LaRocca (KF8EB)

Trustee - Jim Manson (KA8JIM)

**Trustee - Dennis Moriarty (K8AGB)** 

**Trustee - Jerry Shrigley (N8YB)** 

**Trustee - Justin Corner (W8JKC)** 

Trustee - Alan Lamb (KB9TAY)

**Publicity Director - Dennis Moriarty (K8AGB)** 

W8AL repeater = 146.790 MHz



Our monthly meetings are held every third Wednesday at 7:30 P.M. at the Stark County EOC (Emergency Operations Center) at 4500 Atlantic Blvd. NE in Canton, Ohio. (lower level).

See our website for a handy map to the location. All are welcome, especially visitors.

#### RETIREMENT HOME INSTALLS HAM RADIO GEAR

Now we have something to look forward to. In our elder years. Many retirement villages and some skilled nursing facilities not only approve of ham radio, but they even provide places from where residents can get on the air.

One example is in Marshalltown, Iowa, Times-Republican newspaper reports that 81 year old Tom Morgan (W4UTK), has use of three operating ham radio stations complete with a 500-watt amplifier in a comfortable ham shack at the Embers Retirement Community.

The location and equipment were all made possible by Brad Lee (W0VFT), of Phoenix, Arizona. Lee is identified as the CEO of Trilogy-Embers. That's the company that owns Embers and a number of other retirement centers in the United States.

Embers Executive Director is Vicki Bogner. She is quoted as saying that Brad Lee picked up interest in short-wave from his father whom his QRZ dot com page as the late C. W. "Lee", and the first holder of the W0VFT call sign. She went on to say that Brad Lee began by installing ham shacks for residents in his Phoenix area properties. This after he learned some had been ham operators in their own homes but had given up the hobby after moving in to one of the Embers properties.

The full story is on the web at <u>tinyurl.com/retirement-ham-shack</u>. We say this is a great way to support the senior citizens of ham radio who have contributed so much to this nation and to the hobby.





