MRAC Hamateur Chatter

The Milwaukee Radio Amateurs Club

December 2015 Volume 23, Issue 12

One of the World's Oldest Continuously Active Radio Amateur Clubs—since 1917

Presidents' Letter

First, I want to wish all of you a happy and warm holiday season. With the warm weather, you still have time for last-minute work on your antennas. Then, you will be ready for the new radio Santa will bring you for Christmas.

A reminder we will not have a December meeting due to the holidays. Immediately after the holidays starts a busy time for our club. We start off the new year with our table at the West Allis Radio Amateurs' Club Swapfest on January 9th. This year, their fest will be in the Waukesha Expo Area's "round building", and our club table will be located just in front of the stage area. We will also have some table space open for club members to sell a few items, so please email me at ka9wxn@gmail.com to let me know how much space you may need (first come, first serve). Don't forget that ham radio testing will also take place in the Center Court Sports Complex. Information about what to bring for testing is available on the MRAC website: http://www.w9rh.org/ham-radio-exams/

An early Christmas present to everyone: we finally have a new website look! There are still many items that need updating, so please feel free to pass on your comments about the new site pages. This site will be easier to maintain as we move forward, and we are hoping to post more pictures of our club activities and events to show off the many things that we do. Finally, we are in the process of adding PayPal for renewals, our swapfest tickets and tables, and general donations. See the new look here: http://www.w9rh.org/

In other club news, we have extended the logo contest until February 2016. You can find more information explaining the contest on the website: http://www.w9rh.org/logo-contest/ We are looking for a clean, well-defined logo to celebrate our club's 100th anniversary so keep working on your submissions.

We also need to find a new date for the 2016 MRAC Simplex Contest. Since the normal weekend for the contest will include Super Bowl Sunday, we are looking into a new date. It's important for us to have strong member participation this year, especially since we were the winning club in 2015 with a good number of entries. So it's vital that our club members participate and submit logs properly and in a timely manner. Once we schedule the new date, please help us get the word out.

Finally, don't forget our upcoming Swapfest on February 13, 2016 at the MPTV Auction Studios in Brookfield. We really need everyone's help to promote AND to volunteer staff the fest, since the more hands we have to help, the more time everyone has to shop. We even buy pizza for all the volunteers during clean up, so please consider helping us make this Swapfest a success by volunteering. Details about our Swapfest are available on our website: http://w9rh.org/swapfest.html Hope to see you all there!

'73 Dave, KA9WXN

MRAC Officers:

Terms Expiring in 2016

- President – Dave, KA9WXN
- V-President– Vacant
- Secretary – MBH, KC9CMT
- Treasurer – MBH,,KC9CMT
- Director – Vacant

Terms Expiring in 2017

- Director – Al, KC9IJJ
- Director – Hal , KB9OZN

The Club Phone Number is: (414) 332-MRAC or

(414) 332- 6 7 2 2

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www.w9rh.org

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Board of Directors' Meeting Minutes

Board of directors meeting called to order at 7:06 pm by Dave Shank, KA9WXN club president.

Director's present: Michael KC9CMT, Dave KA9WXN, Tom, W9TJP.

Absent: Al KC9IJJ, Hal, KB9OZN

Preliminary Discussion: Tom W9TJP is with us to investigate joining the board. The Treasurers report was presented by Michael, KC9CMT. The treasurers report was approved as read by KC9CMT, a motion to accept was made by Dave, KA9WXN, seconded by Tom, W9TJP. The October balance ended with $20,195.44 in Club accounts. The Board of Directors' meeting minutes were accepted as published in the September chatter by a unanimous vote. We still will be sending the ARRL Spectrum Defense Fund $100 in late 2015. MRAC will be getting a table at the January West Allis Club Swapfest. Invoices for Food, and supplies from the club picnic need to be submitted to the treasurer. The purchase of the new Fusion repeater needs to be billed though the club for reimbursement. The West Allis groups Hamfest will be on January 9th in 2016. New member certificates will be mailed if not handed out when they become available. The clubs PayPal account is setup, and as of now only needs to be verified.

Meeting programs: November meeting will be on the 19th this year with a program on Mesh networks; loading software on wireless access points to gain access to radio bands. No meeting in December, January does not have a topic as of yet. The FM simplex contest is on Superbowl Sunday this year, so may need to be changed. February will be the Food Gathering that goes along with the MRAC/MARRS swapfest. Getting press on the Ham Nation Podcast would be good press for our 100th Anniversary in 2017. Our April meeting is the annual election, plus a presentation TBD. The May meeting will be the annual auction as in past years.

Field Day: The MARC field day effort will be at Konkel park in Greenfield again in 2016. The board would like to have a working committee for the field day 2016 effort.

Special Project Committees & Committee reports:

Repeater Report: The Yaesu Fusion repeater that Yaesu gave the club a great deal on, it is on line as of August. The repeater is the DR-1X, and we have had no lockup issue as happened with the demo unit. Dave, WB9BWP is the repeater trustee and a control operator. The club would like more than one repeater control operator. A club repeater control operator should be a extra class operator to have the kind of privileges that are necessary to operate field day to its fullest extent. With the new digital repeater online, the club needs to redo our co-ordination with the Wisconsin repeater association. The new digital repeater does both analog and Digital voice transmissions.

New Business: Does the Church we use have a new administrator? We do not know as of yet. Dave, KA9WXN has started discussions on possible events for the clubs' 2017, 100th anniversary. The club is in discussions with another organization to delete the DSL and go to a better system.

We need to start planning special event stations for the entire year of 2016/17. Dave, KA9WXN will attempt to generate interest among the membership in forming a committee to handle planning. The winner of the logo contest should be picked during the November meeting, 2017 is the 100th anniversary. The contest will be open to club and non-club people, must hold an Amateur Radio License to be in contest. Copy to be included in the new Logo, ARRL affiliation, Club 100th year, and callsign with Frequency. There has been some talk among the board members regarding a banquet during the 100th anniversary year.

Swapfest Committee: The Clubs' joint swapfest with the MAARS group will be on February 16th, 2016. Complimentary tickets for the swapfest should be ready by the November membership meeting. The club would like to promote the 10-10 international radio club. Dave is going to contact American Science and Surplus, and the Markers' people about having a table at the MRAC swapfest in February of 2016. Tickets will be printed in December, with advanced table sales and ticket orders mailed the last week on January. Photos should be taken of all club activities and uploaded to the club Facebook page and copied to the newsletter editor for insertion into the paper. We will continue to use the Google spreadsheet for the 2016 swapfest.

Special Projects: The club needs someone to take over the FM simplex contest for February of 2016. The club really needs PR and recruitment, business cards have been printed and will be handed out at all personal activities. Joe, N9UX has talked about doing another balloon launch in 2016. Work needs to start on the 100th anniversary celebration that falls in 2017. The idea has been discussed about having a special event station at American Science and surplus in 2017. Perhaps the club will open this up with other clubs for ideas and support. The MRAC has been placed on a waiting list for the State Adopt A Highway program for our nearby area of Milwaukee County. The club did hear from the coordinator of this program and a highway site may be coming soon for the club to maintain.

Dave, KA9WXN the website coordinator for the MRAC is building another website based on WordPress.

Clubs throughout the country need to use the spectrum that they have been given. The 220mhz band is not used very often in the Milwaukee area. A Club calendar is a project that the Board of Directors' would like to pursue. Dave, KA9WXN has been working on this idea. A schedule of upcoming events should be printed in the chatter each month.

A motion was made to adjourn the meeting at 8:12 pm by Tom W9TJP, seconded by Dave, KA9WXN. Meeting adjourned at 8:15 pm.

The Library room will be returned to an orderly condition as it was when we arrived.

Ferrite Bead Inductors

- details of ferrite bead inductors, their properties construction, applications and how they are used to obtain the best performance.

Ferrite bead inductors are used in many areas of electronic equipment as a simple yet effective form of filter.
Using ferrite as their basis, these inductors are simple to make using a bead, or **low cost** if they are bought.
Ferrite bead inductors form very effective filters for applications such as reducing electromagnetic interference because of the properties of the ferrite used within the inductor.

Ferrite bead inductor basics

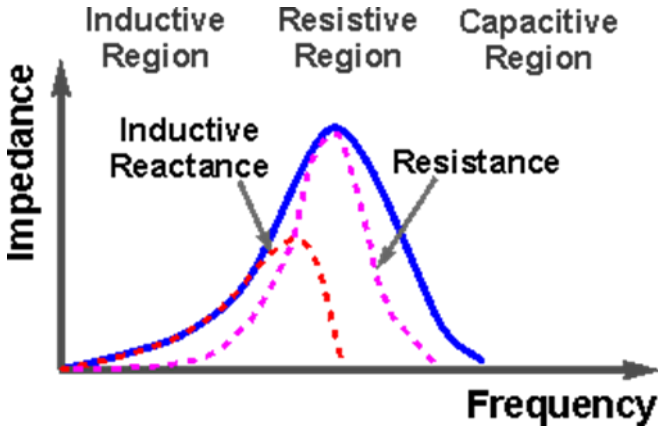
Ferrites provide an excellent **core** material for a bead **inductor**. At low frequencies ferrite bead inductors act as a normal inductor. The ferrites have a high permeability and as a result they make excellent **high density** inductors. Additionally the ferrites are highly resistive like cores including iron where **eddy currents** flow causing losses to be incurred. Ferrites have a high resistivity and therefore the inductor is able to pass signals up to relatively high frequencies (dependent upon the ferrite in use) with only the inductive reactance affecting the circuit and not the resistive eddy current induced losses.

A typical inductor with wire passing through ferrite bead

However as the frequencies increase the eddy current losses rise. In turn this means that the resistive losses rise above frequencies of 10 to 100 MHz dependent upon the ferrite in question.

The fact that resistive losses rise above a certain frequency makes these ferrite bead inductors ideal for applications such as EMI **filtering**. The fact that the high frequency signals can be dissipated as resistive losses means that they are not reflected back into the system where they may find other routes to radiate or conduct. They are dissipated as heat rather than circulating elsewhere in the system.

Still higher in frequency the self-capacitance of the inductor takes over and the **capacitive** reactance dominates. Therefore at frequencies above 500 MHz or so **care** must be taken to ensure that the inductor is not capacitive in nature as this will enable signals to bypass the lossy nature of the ferrite bead inductor.



Constituent elements for impedance of a ferrite bead inductor

For even the highest frequency ferrites, typical **insertion loss** figures of no **more** than 10dB can be expected at frequencies of 2 GHz and more, although this is very much a rule-of-thumb.

Using ferrite bead inductors

Ferrite bead inductors are particularly useful in many RF applications. However to gain the most from them it is necessary to understand some of their limitations as well as how to ensure the benefit from their advantages is maximized. A few pointers are included below:

- ***Correct frequencies:*** As a general rule, ferrite beads are generally only resistive over one decade of frequency. Accordingly it is necessary to choose the ferrite for the frequency over which resistive absorption is required.

Beware resonances: Like any other inductor, a ferrite can form part of a resonant **circuit**. Care must be taken combining ferrite beads with other **components** that are also reactive in either the inductive or capacitive regions. At low frequencies where X >> R, a ferrite bead inductor has a high Q.

One of the advantages of ferrite beads is that they are particularly easy to **install**. A **single** component can be inserted into the equipment, or a ferrite bead can be placed over a wire to provide filtering. This makes they very attractive for using when problems are encountered with equipment that is in service or having been designed, as well as for incorporating into designs at the earliest stages.

Ferrite bead inductors components

Ferrite beads can be obtained or made in a variety of forms.

Ferrite beads: It is possible to obtain small and large ferrite beads. The wire requiring filtering can simply be wound around the bead, passing the wire through the core a number of times, often only two or three turns are required, although on some occasions the wire is simply passed straight through. Small ferrite beads may even be slipped over component leads to suppress parasitic oscillation - for example they may be slipped over the base of a transistor used as an emitter **follower** to suppress possible instabilities there. When current flows in the lead for the ferrite bead inductor, **magnetic flux** is generated inside the bead. As a result, the ferrite bead functions as an inductor.

- ***SMD ferrite bead inductors:*** There is a vast variety of **surface mount** ferrite bead inductors available as ready usable components with specified performance. These can be chosen according to the performance required and easily added to a **new design**. The SMD or chip ferrite bead inductors are made by incorporating the ferrite bead inductors into an SMD format. The **coil** is built up between layers ferrite and the windings incorporated between the layers. The overall three dimensional SMD chip ferrite bead is then made by a process of integration and firing. The structure used for these ferrite bead SMD inductors is essentially the same as that used for the more widely used monolithic **chip inductors**. The difference lies in the fact that the ferrite material used is chosen to suppress noise By fabricating coil structure within the overall SMD ferrite bead inductor assembly, it is possible to achieve a much higher impedance than that of the more traditional leaded ferrite bead inductors. Often these simply have a single wire passed through them and therefore the inductance and effect of the ferrite is much less.

- ***Clamp ferrite cores:*** When it is not possible to wrap a wire around the ferrite bead, it is possible to obtain clamp on cores that can be easily clamped to the **cable** that needs filtering. The clamp approach is used where the connectors on the cable prevent a complete core or bead from being used. Although the wire is not coiled around the core, it is able to increase the self-inductance of the wire or cable sufficiently to have the effect of absorbing the energy of the noise traveling along the wire or cable Often computer monitor and other cables use this approach.

When used to their best, ferrite beads form a particularly effective form of inductor and filter for unwanted signals. They can be particularly effective in their resistive region, where they absorb signals rather than reflecting them back into the circuit where they may cause problems elsewhere. In addition to this they are a low cost component that can be easily added to a circuit.

Survival - Preparing and Planning For Extreme Cold

When winter temperatures drop low, staying warm and safe can be difficult. Extremely cold temperatures often accompany a winter storm, so you may have to cope with power failures and icy roads at the same time. Although staying indoors can reduce the risk of car crashes or falls on the ice, you may also face indoor problems. Your home may become too cold—either due to a power failure or because the heating system isn't adequate for the low temperatures.
When space heaters and fireplaces are used to stay warm, the risk of household fires increases, as well as the risk of carbon monoxide poisoning.
Exposure to cold temperatures, whether indoors or out, can cause other serious health issues even threaten your survival. Young children and the older adults as well as those with other health problems are particularly at risk, but anyone can be affected. To keep yourself and your family safe, you should prepare by knowing how to prevent cold-related health problems and what to do if a cold -weather health emergency arises.
The emergency procedures outlined here are not a substitute for training in first aid. However, these procedures will help you to be prepared and know when to seek medical care and what to do to aid your survival until help becomes available.

When is it Extremely Cold
What is considered extreme cold, and its effects on survival, can vary across different areas of the country. In regions relatively unaccustomed to winter weather, near freezing temperatures are considered "extreme cold." Whenever temperatures drop well below normal in your area and the wind speed increases, heat will leave your body more rapidly. These conditions may lead to serious health problems if you are not prepared to deal with these circumstances. Extreme cold is dangerous! A lack of preparation or rapidly changing weather can bring on survival emergencies in susceptible people, such as those without shelter or who are stranded, or who live in a home that is poorly insulated or without heat.

Plan Ahead to Survive
Prepare for extremely cold weather every winter—it's always a possibility. There are steps you can take in advance for greater wintertime safety in your home and in your car.

Winter Survival Kit for Your Home
Keep several days' supply of these items:
Food that needs no cooking or refrigeration, such as bread, crackers, cereal, canned foods, and dried fruits. Remember baby food and formula if you have young children. (A 3 to 5 day supply, this will keep you off the roads during dangerous conditions)
Water stored in clean containers, or purchased bottled water (5 gallons per person) in case your water pipes freeze and rupture. (Leaving water trickling from faucets can keep them from freezing if the temperatures aren't to low.)
Medicines that any family member may need.
If your area is prone to long periods of cold temperatures, or if your home is isolated, stock additional amounts of food, water, and medicine to insure you have the supplies needed during a survival situation.

Prepare Your Home To Survive Cold Weather
Although periods of extreme cold cannot always be predicted far in advance, keeping informed of the local and national weather forecast can sometimes give you several days' notice of a change in the weather. Listen to weather forecasts regularly, and check your emergency survival supplies whenever a period of extreme cold is predicted.
If you plan to use a fireplace or wood stove for emergency heating, have your chimney or flue inspected each year. Build up in the chimney or flue can lead to a home fire. Being left in the cold and having your home destroyed or damaged is not worth the risk of saving a little money. Find chimney sweep in the yellow pages of your telephone directory under "chimney cleaning."

Also, if you'll be using a fireplace, wood stove, or kerosene heater, install a smoke detector **and a battery-operated carbon monoxide detector** near the area to be heated. Test them monthly, and replace batteries twice yearly.
Your ability to feel a change in temperature decreases with age, and older people therefore are more susceptible to health problems caused by cold. If you are over 65 years old, place an easy-to-read thermometer i**ndoors in your home** where you will see it, check the temperature of your home regularly during the winter months.
Insulate any water lines that run along exterior walls with foam or pipe wrap insulation so your water supply will be less likely to freeze. In difficult situations, heat tape can sometimes keep pipes from freezing. To the extent possible, weatherproof your home by adding weather-stripping, insulation, insulated doors and storm windows, or thermal-pane windows. Keeping the cold out is key to staying warm.

If you have pets, bring them indoors. If you cannot bring them inside, provide adequate shelter to keep them warm and make sure that they have access to **unfrozen water** outside.

Prepare Your Car for Winter
You can avoid many dangerous winter travel problems by planning ahead. Have maintenance service on your vehicle as often as the manufacturer recommends. In addition, every fall:
Have the radiator system serviced, or check the antifreeze level yourself with an antifreeze tester (you can obtain a antifreeze checker at any automotive store. Ask the sales person to show you how it works if you need help, instructions are found on the packaging.). Add antifreeze, as needed. (note: some atifreeze can be purchased pre mixed and can simply be added straight into a **cool radiator (not hot!)** other bottles of antifreeze have to be mixed with water before adding. Mixing instructions are on the back of the bottle.)
Replace **windshield-wiper fluid** (this fluid will be needed during rainy icy weather) with a wintertime mixture.
Replace any worn tires, and check the air pressure in the tires.

Indoor Safety

Heat Your Home Safely

If you plan to use a wood stove, fireplace, or space heater, be extremely careful. Follow the manufacturer's instructions, keep items away from the heater, and remember these safety tips:

Use fireplace, wood stoves, or other combustion heaters only if they are **properly vented to the outside** and do not leak flue gas into the indoor air space.

Do not burn paper in a fireplace. (It can clog the flue or cause outside fires)

Ensure adequate ventilation if you must use a kerosene heater. (these heaters burn up oxygen)

Use only the type of fuel your heater is designed to use—don't substitute.

Do not place a space heater within 3 feet of **anything** that may catch on fire, such as drapes, furniture, or bedding, and never cover your space heater.

Never place a space heater on top of furniture or near water.

Never leave children unattended near a space heater.

Make sure that the cord of an electric space heater is not a tripping hazard but **do not run the cord under carpets or rugs**. The cord may get hot and start a fire if it is covered.

Avoid using extension cords to plug in your space heater. Extension cords often overheat and start fires when used with a space heater.

If your space heater has a damaged electrical cord or **produces sparks, do not use it**.

Store a multipurpose, dry-chemical fire extinguisher near the area to be heated.

Protect yourself from carbon monoxide (CO) poisoning by installing a battery-operated CO detector and never using generators, grills, camp stoves, or similar devices indoors. Carbon monoxide poisoning kills or sickens many people every year. Space heaters cause many house fires and deaths every year.

Light and Cook Safely

If there is a power failure:

Use battery-powered flashlights or lanterns rather than candles, if possible.

Never leave lit candles unattended.

Never use a charcoal or gas grill indoors—the fumes are deadly.

Never use an electric generator indoors, inside the garage, or near the air intake of your house because of the risk of carbon monoxide poisoning:

Plug in appliances to the generator using individual heavy-duty, outdoor-rated cords.

Do not use the generator or appliances if they are wet because of the risk of electrocution.

Do not store gasoline indoors where the fumes could ignite.

Conserve Heat

You may need fresh air coming in for your heater or for emergency cooking arrangements. However, if you don't need extra ventilation, keep as much heat as possible inside your home. Avoid unnecessary opening of doors or windows. **Close off unneeded rooms**, stuff towels or rags in cracks under doors, and close draperies or cover windows with blankets at night.

Monitor Body Temperature

Infants less than one year old should never sleep in a cold room because (1) infants lose body heat more easily than adults; and (2) unlike adults, infants can't make enough body heat by shivering. Provide warm clothing for infants and try to maintain a warm indoor temperature. If the temperature cannot be maintained, make temporary arrangements to stay elsewhere. In an emergency, you can keep an infant warm using your own body heat. If you must sleep, take precautions to prevent rolling on the baby. Pillows and other soft bedding can also present a risk of smothering; remove them from the area near the baby.

Older adults often make less body heat because of a slower metabolism and less physical activity. If you are over 65 years of age, check the temperature in your home often during severely cold weather. Also, check on elderly friends and neighbors frequently to ensure that their homes are adequately heated.

Keep a Water Supply

Extreme cold can cause water pipes in your home to freeze and sometimes rupture. When very cold temperatures are expected:

Leave all water taps slightly open so they drip continuously. Keep the indoor temperature warm.

Improve the circulation of heated air near pipes. For example, open kitchen cabinet doors beneath the kitchen sink.

Keep a backup supply of water

If your pipes do freeze, do not thaw them with a torch. Instead, thaw them slowly by directing the warm air from an electric hair dryer onto the pipes.

If you cannot thaw your pipes, or the pipes are ruptured, use bottled water or get water from a neighbor's home. As an emergency measure—if no other water is available—snow can be melted for water. Bringing water to a rolling boil for one minute will kill most microorganisms or parasites that may be present, but won't remove chemical pollutants sometimes found in snow.

Eat and Drink Wisely

Eating well-balanced meals will help you stay warmer. **Do not drink alcoholic beverages (Alcohol may cause a warm feeling, this is because blood, normally kept circulating in your organs during cold weather to protect your survival, will come to the skin, this causes your body to lose it's heat much more rapidly)** or caffeinated beverages—they cause your body to lose heat more rapidly. Instead, drink warm, sweet beverages or broth to help maintain your body temperature. If you have any dietary restrictions, ask your doctor.

Enhancing Humanity

Ray Tallis peers into the future, without fear.

"Tereza is staring at herself in the mirror. She wonders what would happen if her nose were to grow a millimetre longer each day. How much time would it take for her face to become unrecognizable? And if her face no longer looked like Tereza, would Tereza still be Tereza?"

The Unbearable Lightness of Being, Milan Kundera.

There is increasing concern amongst a wide range of commentators that human nature is in the process of being irrevocably changed by technological advances which either have been achieved or are in the pipeline. According to a multitude of op-ed writers, cultural critics, social scientists and philosophers, we have not faced up to the grave implications of what is happening. We are sleep-walking and need to wake up. Human life is being so radically transformed that our very essence as human beings is under threat.

Of course, apocalypse sells product, and one should not regard the epidemiology of panic as a guide to social or any other kind of reality. The fact that one of the most quoted panickers about the future is Francis Fukuyama, who has got both the past wrong (*The End of History*) and the present wrong (recovered neo-con Pentagon hawk), should itself be reassurance enough. Nevertheless, it is still worthwhile challenging the assumptions of those such as Fukuyama who are trying to persuade us to be queasy about the consequences of the various technologies that have brought about enhancement of human possibility and, indeed, want to call a halt to certain lines of inquiry, notably in biotechnology.

The most often repeated claim is that we are on the verge of technological breakthroughs – in genetic engineering, in pharmacotherapy and in the replacement of biological tissues (either by cultured tissues or by electronic prostheses) – which will dramatically transform our sense of what we are and will thereby threaten our humanity. A little bit of history may be all that is necessary to pour cooling water on fevered imaginations. In 1960, leading computer scientists, headed by the mighty Marvin Minsky, predicted that by 1990 we would have developed computers so smart that they would not even treat us with the respect due to household pets. Our status would be consequently diminished. Anyone seen any of those? Smart drugs that would transform our consciousness have been expected for 50 years, but nothing yet has matched the impact of alcohol, peyote, cocaine, opiates, or amphetamines, which have been round a rather long time.

It was expected that advances in the understanding of the neurochemistry of dementia in the 1970s would permit us not only to restore cognitive function in people with Alzheimer's disease, but also to artificially boost the intelligence of people without brain illness. The results have been a little disappointing, as the recent judgment by the National Institute of Clinical Excellence that anti-dementia drugs have only modest benefits reminds us. Gene therapy that was going to deliver so much in the 1980s is still waiting to deliver.

So don't hold your breath; you'll die of anoxia. Of course changes will come about eventually. But it is the *pace* of change that matters. We can individually and collectively adapt to gradual technological changes; that is why they never quite present the insuperable challenges some doomsayers and dystopians anticipate. In Victorian times, it was anticipated that going through a dark tunnel in a train at high speed (30 mph) would be such a shocking experience that people would come out the other side irreversibly damaged. In one of his last poems, published in 1850, Wordsworth opined that the infantility of illustrated newspapers – the first tentative steps towards the multimedia of today – would drive us back to "caverned life's first rude career" ('Illustrated Books and Newspapers'), and he felt that the endless influx of news from daily papers would incite us to a level of unbearable restlessness.

Railway journeys and tabloid newspapers have not had the dire effects that were predicted. Even the most radically transformative technologies have not had the impact we might have expected. The dramatic electronification of everyday life that has taken place over the last few decades has not fundamentally altered the way we relate to each other. Love, jealousy, kindness, anxiety, hatred, ambition, bitterness, joy etc., still seem to have a remarkable family resemblance to the emotions people had in the 1930s. The low-grade bitchiness of office politics may be conducted more efficiently by email, but its essential character hasn't changed. Teenagers communicating by mobile phones and texts and chat rooms and webcams still seem more like teenagers than nodes in an electronic network.

I have to admit a little concern at what we might call the e-ttenuation of life, whereby people find it increasingly difficult to be here now rather than dissipating themselves into an endless electronic elsewhere; but inner absence and wool-gathering is not entirely new, even if it is now electronically orchestrated. It just becomes more publicly visible. What's more, there is something reassuring about electronic technology: because it is widely and cheaply available and because it is so smart, it allows us to be dumb, and so compresses the differences between people.

Of course, people are worried about more invasive innovations; in particular, the direct transformation of the human body. And this is where the gradualness of change is important, because as individuals we have a track record of coping with such changes without falling apart or losing our sense of self entirely. After all, we have all been engaged all our lives in creating a stable sense of our identity out of whatever is thrown at us. This idea is worth dwelling on.

We humans are unique among the animals in having a coherent sense of self, and this begins with our appropriating our own bodies as our own. This is our most fundamental human achievement: that of transforming our pre-personal bodies – with their blood and muscles and snot and worse – into the ground floor of our personal identity (see my forthcoming book, *My Head: Portrait in a Foxed Mirror*, Atlantic Books). Looked at objectively, our bodies beneath the skin are not terribly *human*; indeed, they are less human than our human technologies. There is very little in my purely organic body that I could say is *me*. Most of the meat of which I am made and which I assume as myself is pretty alien: "our flesh/ Surrounds us with its own decisions" as Philip Larkin said in 'Ignorance' in *The Whitsun Weddings*. On the whole, those decisions are not very pleasant.

At the root of humanity is what in *I Am: A Philosophical Inquiry into First-Person Being* I have called 'the Existential Intuition' – the sense that 'I am this'; our appropriation of our own bodies as persons who participate in a collective culture. Even at a bodily level, this intuition withstands quite radical changes. And by this I don't just mean coping with a wooden leg or a heart transplant, or being able to reassume ourselves and our responsibilities each morning when we wake up or when we come round from a knock-out blow. I mean something more fundamental – namely, normal development. We grow from something about a foot long and weighing about 7 pounds, to something about 6 foot long and weighing about 150 pounds, and for the greater part of that period we feel that we are the same thing. We assimilate these changes into an evolving and continuous sense of our own identity.

This is possible because change happens gradually and because it happens to all of us. Gradualness ensures continuity of memory alongside an imperceptible change in our bodies and the configuration of the world in which we live. That is why my earlier reassurances emphasized the gradualness of technological advance. If I look at myself objectively, I see that I am the remote descendent of the 10-year-old I once was, and yet my *metamorphosis* is quite unlike that of Kafka's man who turns into a beetle. My dramatic personal growth and development is neither sudden nor solitary; and this will also be true of the changes that take place in human identity in the world of changing technologies.

Yes, we shall change; but the essence of human identity lies in this continuing self-redefinition. And if we remember that our identity and our freedom lie in the intersection between our impersonal but unique bodies and our personal individual memories and shared cultural awareness, it is difficult to worry about the erosion of either our identity or our freedom by technological advance.
If, as I believe, the distinctive genius of humanity is to establish an identity which lies at an ever-increasing distance from our organic nature, we should rejoice in the expression of human possibility in ever-advancing technology. After all, the organic world is one in which life is nasty, brutish and short, and dominated by experiences which are inhumanly unpleasant. Human technology is less alien to us than nature (compare: bitter cold with central heating; being lost without GPS and being found with it; dying of parasitic infestation or spraying with pesticides).

Anyone who considers the new technologies as inhuman, or as a threat to our humanity, should consider this. Better still, they should spend five uninterrupted minutes imagining the impact of a major stroke, of severe Parkinson's disease, or Alzheimer's disease on their ability to express their humanity. Those such as Fukuyama who dislike biotechnology do not seem to realize that the forms of 'post-humanity' served up by the natural processes going on in our bodies are a thousand times more radical, more terrifying, and more dehumanizing than anything arising out of our attempts to enhance human beings and their lives. Self-transformation is the essence of humanity, and our humanity is defined by our ever-widening distance from the material and organic world of which we are a part, and from which we are apart.

L'homme passe infiniment l'homme. (Blaise Pascal, *Pensées*)

In short, do not be afraid.

Ray Tallis is a physician, philosopher, poet and novelist. His novel Absence *has recently been published in paperback.*

Christmas in A Foxhole, by Gary Jacobson

On this holiest night of the year,
Soldiers of God in battlefields far and away,
Draw near...
Hark, a "boy next door" in combat role,
Spending Christmas in a foxhole
Abiding war's downright dangerous rigmarole
Bearing honor ensconced in patriotic refrains,
Echoing faintly glorious strains
Christmas ideals impressionable stains
Forever ingrained on young hearts reigns.

Look ye to the wisemen's star
Shining above Vietnam afar
Shining on a not-so-festive jungle site.
Yet all is calm on this most Holy Night,
This brisk winter night.
At least till the next firefight.

For Vietcong elves, merry and wild,
Neither tender nor mild,
Will not let him sleep in heavenly peace.
Too much to ask that for one night
A soldier might be granted release,
The killing might cease.

He thought of Santa and his sleigh,
Laughed at thought of his calling today.
The only man Nam's likely to see lively and quick
Sure ain't Saint Nick...
More likely the devil, Old Nick,
One of them Vietcong dipsticks
Who in the worst way want to give
This "boy next door" licks,
To deck his halls,
Kick his b____,
uh, er, hind end.
When specters of death all around you falls,
Holiday spirit kinda palls.

Dreams of mistletoe set his heart all aglow,
But nobody's in the foxhole but GI Joe
And no way's anybody kissin' him anyway
So no tidings of comfort and joy today,
No sweet young things here to make hearts go astray.

Yeah, I know, no reindeer tonight!
There's no kind of merry delight in sight,
Standing guard late into the night
On Christmas Eve, on Christmas Eve,
Still trying hard, still to believe,
In fading hopes of peace on earth,
Praying for one special night, fears might leave,
Good will to men reprieve.

He dreams of chestnuts roasting on an open fire,
Of yuletide carols sung by a choir.
As on sweet and sour air in the distance roll,
A singing, ringing bell's joyous toll...
Or is it the sound of guns,
Drum, drum, drumming,
Stalking ever nearer, step-by-step coming,
Into his perimeter mortar's walking,
VC firing for effect hearkening
Attendant death's afrighted fears
A new borne sound bearing gifts he hears.

As he stands guard, weary tears wet his eyes,
Wondering if tonight will be the holy night
He dies!
Sweating,
Grieving,
For a world in sin and error pining
For hearth and home in quiet times yearning

Silently, secretly, praying
He'll live to see coming morn.
In Vietnam so all alone, so forlorn,
Dreaming of home, mother and apple pie,
Cursing the light of a killing moon in the sky.

Searching his body for blood-lusting leeches
He humbly beseeches...
"Oh God, I pray tonight
Will be a silent night.
Stifle Ye waves of war's withering blight,
Temper it with Thine Holy Light...
Hallelujah,
To the dawn of Thy redeeming grace
Hallelujah...hallelujah!
Oh God help me, help me,
In this hour Thine sacred faith to embrace.
Oh Thou King Of Kings, Help me,
I'm too young to see thy Holy Face."

Beside the foxhole he lays his weary head,
Listening as 'outgoing' night rounds pass
Just overhead,
Sent on appointed rounds, desolation to spread
Spreading their particular kind of joy,
To Vietcong who in darkening jungles deploy
On this sacred Christmas Eve
This war the holidays do thieve.

He listens tight for 'incoming' artillery,
Sweltering mid war's debauchery,
Senseless butchery.
War's man's inhumanity to man,
Raging rampant throughout this fevered land.

He thinks of terrible consequences dire
Animosity this ancient nation enflamed
So many men embroiled in hating's ire.
Why did he have to be the one called

To put out the fire?

He aches in his gut from black water that stank,
Moving and rank,
Athirsting on his last patrol he drank.
His Christmas gift's a case of dysentery,
Sick and tired of Nam's humbug festoonery
War's political flimflammery.

Early Radio: Military Communications

His mother and child back in "the world,"
All alone.
Waiting for him,
Just him...
His jungled hall's definitely not decked
With boughs of holly,
Be quite a while before he feels really jolly...

He dreams silent dreams
Of his own round yon virgin at home

Still dreaming dreams of joy to come
When a big silver bird will carry him home.
To make that last air assault on LZ Travis...
He'll sing Joy to "the world" as no more he has
To battle Mr. Charles face-to-face, vis-à-vis.

On this Christmas Eve the boy's dreaming
Of his farewell to "the Nam" bidding
Saying goodby to Nam's unholy combat matrix,
A hell-inspired mix,
Dreaming of Nam for the last time vanishing
Out his rear door six.

Then...
A Godawful sound rustles in the jungle
Setting hair on his spine all a-tingle.
That sound sure ain't made by jingle bells.
It's likely another kind of bell that knells
Just one of a thousand little hells,
From the very ruler of hell
Like a quieted noise of a rifle bolt when it clicks,
A sound that truly makes sinking hearts sick.
On this Christmas night, Holy night,
He can't bear for life to fight,
No, no, not tonight.
Let there be peace tonight...
Spirits of Christmas combat his soul bedight,
Writing what may be his last words in a poem,
A book of war Tome
Of being ever ready.
His nerves somehow steady.
He must be brave,
If he is his soul on Christmas Eve to save.

Still, still,
He sees the star of the Holy night,
Under an alien moon killing bright,
In merriment through fetid jungles streaming,
To silhouette his body in bright shining
Exposing an enemy marauding...backlighting.

Hark, hear the herald angel voices,
A battle looms mid Christmas rejoices.
Tracers join the triumph of the skies,
Shouts of pain angelic hosts proclaim
Exploding crescendos, who's to blame.
Still, still, they're coming rampaging
Coming to kill and maim.

Just one more fight in a weary night that bites,
Just one more in a series of forsaken nights.
Hold bleak hope in a glorious morn,
All hopes of Christmas joy in a foxhole shorn,

His soul not feeling its chosen worth
Enmired in civility's blackened dearth,
On this night of the dear Savior's birth
Dreaming far away where a weary world rejoices
Without him,
Without him!

Name of Net, Frequency, Local Time	Net Manager
Badger Weather Net (BWN) 3984 kHz, 0500	W9IXG
Badger Emergency Net (BEN) 3985 kHz, 1200	NX9K
Wisconsin Side Band Net (WSBN) 3985 or 3982.5 kHz, 1700	KB9KEG
Wisconsin Novice Net (WNN) 3555 kHz, 1800	KB9ROB
Wisconsin Slow Speed Net (WSSN) 3555 kHz, Sn, T, Th, F, 1830	N1KSN
Wisconsin Intrastate Net - Early (WIN-E) 3555 kHz, 1900	WB9ICH
Wisconsin Intrastate Net - Late (WIN-L) 3555 kHz, 2200	W9RTP
ARES/RACES Net 3967.0 kHz, 0800 Sunday	WB9WKO
* Net Control Operator needed. Contact Net Manager for information.	

Next Regular Meeting

The next meeting will be on **Thursday, January 28th, 2016,** at 7:00PM. We meet in the Fellowship Hall of Redemption Lutheran Church, 4057 N Mayfair Road. Use the south entrance. Access the MRAC Yahoo group for important details about the February Meeting.

Meeting Schedule:

February 25th 2016- 7 pm

Please do not call the church for information!

Club Nets

Please check in to our nets on Friday evenings.

Our ten meter SSB net is at **8:00 p.m.** at **28.490 MHz USB** Our two meter FM net follows at **9:00 p.m**. on our repeater at **145.390 MHz** with a minus offset and a **PL of 127.3 Hz**.

Visit our website at: **www.w9rh.org**

Or phone (414)-459-9741

Chatter Deadline

The **DEADLINE** for items to be published in the **Chatter** is the **15th of each month**. If you have anything (announcements, stories, articles, photos, projects) for the 'Chatter, please get it to me before then.

You may contact me or Submit articles and materials by e-mail at: W9rhmrac@Gmail.com

or by Post to:

Michael B. Harris

807 Nicholson RD

South Milwaukee, WI 53172-1447

VE Testing:

January 30th, 9:30am— 11:30am

No testing: June, July or December

Location: Amateur Electronic Supply Time: 9:30 AM (Walk-ins allowed)

ALL testing takes place at: Amateur Electronic Supply 5720 W. Good Hope Rd. Milwaukee, WI 53223

Area Swapfests

Jan 9th, 2016 West Allis Arc's 44th Annual Midwinter Swapfest Location: Waukesha, WI Type: ARRL Hamfest
Sponsor: West Allis Radio Amateur Club (WARAC)
Website: http://www.wares.org

Jan 17th, WCRA 49th ANNUAL MID-WINTER HAMFEST
Location: St. Charles, IL Type: ARRL Hamfest
Sponsor: Wheaton Community Radio Amateurs
Website: http://www.wheatonhamfest.org

MRAC Working Committees

100th Anniversary:

- Dave—KA9WXN

Net Committee:

- Open

Field Day

Dave—KA9WXN, Al—KC9IJJ

FM Simplex Contest

- Joe – N9UX
- Jeff – K9VS

Ticket drum and drawing

- Tom – N9UFJ

Newsletter Editor

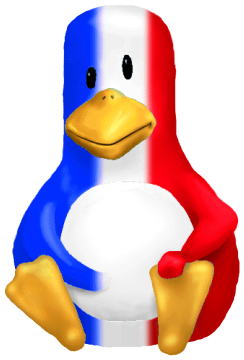
- Michael-KC9CMT
- Pancho– KA9OFA

Webmaster

- Dave, KA9WXN

Refreshments

- Hal—KB9OZN



Membership Information

The Hamateur Chatter is the newsletter of MRAC (Milwaukee Radio Amateurs' Club), a not for profit organization for the advancement of amateur radio and the maintenance of fraternalism and a high standard of conduct. MRAC Membership dues are $17.00 per year and run on a calendar year starting January 1st. MRAC general membership meetings are normally held at 7:00PM the last Thursday of the month except for November when Thanksgiving falls on the last Thursday when the meeting moves forward 1 week to the 3rd Thursday and December, when the Christmas dinner takes the place of a regular meeting. Club Contact Information

Our website address **http://www.w9rh.org**

Telephone **(414)-459-9741**

Address correspondence to:

MRAC, PO Box 26233, Milwaukee, WI 53226-0233

Email may be sent to: **w9rh@arrl.net .** Our YAHOO newsgroup:

http://groups.yahoo.com/group/MRAC-W9RH/

CLUB NETS:

- The Six Meter SSB net is Thursday at 8:00PM on 50.160 MHz USB
- Our Ten Meter SSB net is Friday at 8:00PM on 28.490 MHz ± 5 KHz USB.
- Our Two Meter FM net follows the Ten meter net at 9:00PM on our repeater at 145.390MHz - offset (PL 127.3)

The MRAC HamChatter is a monthly publication of the Milwaukee Radio Amateurs' Club. Serving Amateur Radio in Southeastern Wisconsin & all of Milwaukee County
Club Call sign – W9RH
MRAC Website: http://www.W9RH.org
Editor: Michael B. Harris, Kc9cmt, kc9cmt@Earthlink.net

Milwaukee Area Nets

Mon.8:00 PM 3.994 Tech Net

Mon.8:00 PM 146.865- ARRL Newsline

Mon.8:00 PM 146.445+ Emergency Net

Mon.8:00 PM 146.865- Walworth County ARES net

Mon. 8:00 PM 442.100+ Railroad net, also on EchoLink

Mon. 8:45 PM 147.165- ARRL Audio News

Mon. 8:00 PM 442.875+ WIARC net also on EchoLink 576754

Mon. 8:30 PM 146.820 Waukesha ARES Net —

on the 1st, 3rd, and 5th Monday of each month.

Mon. 9:00 PM 147.165– Milwaukee County ARES Net

Tue.9:00 AM 50.160 6. Mtr 2nd Shifter's Net

Tue. 9:00 PM 145.130+ MAARS Hand Shakers Net

Tue. 8:00 PM 7.035 A.F.A.R. (CW)

Wed. 8:00 PM 145.130+MAARS Amateur Radio Newsline

Wed. 8:00 PM 147.045+ West Allis ARC net

Wed. 8:00 PM 28.365Mhz 10/10 International Net

Wed. 8:00 PM 147.270+ Racine County ARES net

Wed. 9:00 PM 145.130+MAARS SwapNet, Allstar FM-38

Thur. 8:00 PM 50.160, 6 Mtr SSB Net

Thur. 8:00 PM 443.800+ Tech Net

Thur. 9:00 PM 146.910+ Computer Net

Fri. 8:00 PM 28.490 MRAC W9RH 10 Mtr SSB Net

Fri. 9:00 PM 145.390+ W9RH 2 MTR. FM Net

Sat. 7:30 AM MW Classic Radio Net , Freq.—3885 AM

Sat. 8:00 PM 146.910+ YL's Pink HAMsters Net

Sat. 9:00 PM 146.910+ Saturday Night Fun Net

Sun 8:00 AM, State ARES Net 3967/3977.5/145.470

Sun 8:30 AM 3.985 QCWA (Chapter 55) SSB net

Sun 9:00 AM 145.565+ X-Country Simplex Group

Sun 8:00 PM 146.910+ Information Net

Sun 8:00 PM 28.365 10/10 International Net (SSB)

Sun 9:00 PM 146.910+ Swap Net

Daily: Milwaukee — Rag Chew Net: 7:00 AM, 3850 SSB + Florida Net 7 am, 14.290 mhz.

2meter repeaters are offset by 600KHz - - 70 centimeter repeaters are offset by 5 MHz

SSB frequencies below 20 meters are LSB and for 20 Mtr and above are USB.