ARASWF Newsletter

Vol. MMX No.8 The Journal of the Amateur Radio Association of Southwest Florida
August 2010

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Next Meeting will be held on August 23rd 2010 at 7.00pm

From the President's Shack

I should like to encourage as many of you as possible to attend the next meeting as there have been some developments recently that concern the club and we would also like to discuss the future direction that you, the Members, would like to see the Club take.

On a separate issue, despite an e-mail being sent to all Members recently, Bob's (WB2TGY) LDG tuner has still not materialized; you will recall that it has been missing since he lent it to the Field Day participants over the Field Day weekend in June. I would ask please that everyone who attended Field Day once again look very carefully in the cars or any belongings that they took to and brought back from the Field Day site. If you find it then just let David know at kg4zlb@gmail.com or bring it with you to the Club meeting.

Arrangements can be made to collect it from you if you can not make the meeting. These things happen, items do get swallowed in car trunks so please take a look – many thanks!

73's
Dave
W4SFR

Meeting Minutes

Amateur Radio Association of Southwest Florida

Regular Monthly Business Meeting held at the Golden Gate Community Center, Golden Gate, Florida, on Tuesday, July 27th, 2010

Officers and Directors Present: David Schaare, W4SFR - President
Bob Graf, W2HI - Secretary
Tim Wallen, KC4SSD – Treasurer
George Tomlinson, AA4GT – Director

Apologies: David Worboys , KG4ZLB – Vice President
Peter Gaddy, KK4PG – Director
Karl Geng, N1DL – Director
Tim Gibbons, N4PIX – Director

MEETING MINUTES

Meeting Called To Order:
There being a quorum present with 11 members (including 4 officers and directors) and 3 guests in attendance, Dave, W4SFR, called the meeting to order at 7:00 pm.

Introductions:
All attendees introduced themselves by name and call for the benefit of the members and guests in attendance. Guest attendees Mark KC8RRO, Bill N1MMQ, and Thom N5KFR introduced themselves and gave a brief resume of their backgrounds and activities.

Reading & Approval of Previous Minutes:
Reading of the Minutes of the previous meeting was dispensed with since there were none recorded due to the Secretary's absence.

Treasurer's Report:
Tim, KC4SSD, that as of July 27th, 2010, the bank balance is $3,497.83, after expending approximately $568.95 since May 25th for taxes, property insurance, food for field day, and field day certificates.

Officers' Reports:
Filed Day: Dave W4SFR distributed Field Day Certificates to those members who actively participated. Thanks go to Bob W2HI for design and preparation of the certificates.

Committee Reports:
Field Day: Tim KC4SSD reported on Field Day results, indicating that 1,664 total contacts were made, which surpassed last year's total by about 400 contacts.

Missing Antenna Tuner: It was reported that an antenna tuner belonging to Bob WB2TGY was not returned to him after field day, and is missing. All members attending field day are urged to check the equipment they brought home with them to see if the missing tuner might have been brought home with them by accident.

Old Business:

New Business:
Echo Link Net: Harry KD4JMV announced his desire to use the club 146.67MHz repeater every Monday night from 7pm – 7:30pm for an echo-link net, and requested approval to do so. Referred to the Executive Board.

Special Feature:
There was no special feature this month due to the size of attendance. However, Bill K2ZEL discussed his visit to the State EOC in Tallahassee and subsequent discussions with John Fleming of the State Emergency response Team.

50/50:
The 50/50 raffle was won by Bill, K2ZEL, who graciously donated half his winnings back to the club treasury.

Adjournment:
There being no further business, the meeting was adjourned by Dave W4SFR at 8:00 pm.

Bob Graf, W2HI
Secretary

New Members

Welcome to Francis (Mickey) Hutchins, Jr., (KB3SKH) our newest Member!

And whilst on the subject of new members, or rather returning members, I was pleased to receive this e-mail which I wanted to share with you.

David, thanks a lot for the Newsletter.

Wanted to tell you I will miss the next 3 or 4 meetings. Going to be out of town. Did not think I would be vacationing this Summer, but the good Lord has given me more strength and am ready to travel a bit.

I was a member in early 2000. Sorry I let the membership drop.

Am active on hf. Mainly hang out early mornings and mid-afternoons on 14305khz and 7251khz. Am also an early member of that gang.

Been active ham now 51 years. Yes, one of the old coots. hi

Thanks for entertaining my membership. Will try to be more active, when I return.

God bless

Jim Ackerson K4PNJ

News Items

Some sad news again I am afraid. George (AA4GT) let me know that his his Wife's (Mary NV4Z) son tragically passed on August 7th after being hit by a vehicle – on behalf of the Club I would like to offer or deepest condolences to Mary and George at this most difficult time.

On a lighter note and a bit prior to the above news, George sent me the following article:

Racine County HAM Tower Up For Debate

Mount Pleasant Debating Whether To Keep It Up

MOUNT PLEASANT, Wis. --

The Mount Pleasant Planning Commission will discuss whether a 10-year-old boy can keep his HAM radio up and running.

The commission will meet Wednesday.

Samm Markstrom, 10, has won awards for his communication assistance during bad weather and earthquakes.

But, neighbors have complained that his 62-foot tower is too high and is interfering with their TV signals.

The commission now has to decide what to do with the tower.

The article has stirred up some lively conversation and if you would like to read more then please follow this link. My only thought was that if a 10 year old boy can get his parents to let him have a 62 foot tower, would they like to adopt me!

from Karl, N1DL

"New mobile station N1DL

IC7000 and Turbo tuner into a Hi Q 3-80 screwdriver antenna installed in a 2010 Land Rover LR4 (helping the British economy HI)"

(editors note: sorry Karl, I believe that Land Rover is now owned by Tata of India!)

Here is an interesting article on band-pass filters for use during Field Day submitted by George (AA4GT)

Band-Pass Filters for Field Day Sites – a Literature Survey

Charles Schell, WA3KVN

August 3, 2010

Introduction

During Penn Wireless' (PWA) Field Day, 2010, the 40M CW station experienced considerable de-sensing (front-end overload) from the operations of other, close-in stations. Some rather crude investigations revealed the near-by 40M SSB station was the main source of interference. As in most interference situations, the question arises, "Who is responsible and who should fix the problem?" Our answer, given the situation was to persevere as best we can. So we, on the 40M CW station, adopted a strategy that avoided 40M CW when possible, going back to it when conditions were more palpable. We worked a lot of 80M CW and even some 15M and 20M CW. The net effect of this strategy,however, was a considerably reduced score, over prior years.

After this Field Day experience and a subsequent TechNet discussion, I agreed to do an initial literature search on the topic of Field Day Band-Pass Filters. Going into the search, the basic strategy was to look into the notion of using high powered Band-Pass filters on all Field Day transmitters, but focusing (at least for the first year) on 40M. The objective was simply to improve on the inter-station interference situation without burdening the club with high costs. Commercial Band-Pass filters do exist; however, they cost in the $100.00-to-$200.00 per filter range. With many stations operating at the PWA Field Day site, outfitting each transmitter with commercial filters would be cost prohibitive.

The Search Strategy

This author used three main sources to scour the literature. The first was the ARRL QST archive along with the author's personal collection of recent QST magazines, going back about five years. The second was the Internet via the Google search engine. Finally, the third was the 2007 ARRL Radio Amateur's Handbook. Other sources exist, such as CQ Magazine, QEX Magazine, Ham Radio Magazine, etc., however these are not accessible to the author.

Two Band-Pass Filter Station Architectures

The literature shows that, over the last 40 years, two Band-Pass filter approaches were taken. One is to use, sometimes rather exotic, filters on the front end of the receiver section and the other is to use high power, but less complex filters on the antenna feed line, affecting both the transmitter output and the receiver input.

Of these, the receive-only approach was attractive in the earlier years where separate receivers were often used in Field Day operations. Using modern transceivers, this approach would dictate some kind of automatic switching mechanism to bypass the filter when transmitting. This requirement makes the filter subsystem less transparent to operators in that different transceivers have different interfaces for managing this switchover. Given that Field Day stations are not guaranteed to use the same transceivers from year to year, it would be better to build a Band-Pass capability that didn't require use of bypassing techniques.

As a result, the decision was made to focus the literature search on the use of higher-powered, but less complex band-pass filters. In addition, we wanted to achieve the lowest costs possible per filter and yet have an easy-to-reproduce design. As we will soon see, the literature does suggest a reasonable solution to these requirements.

Literature Review

Myers and Greene (Ref. 1) discuss one approach using the receive-only filter architecture. While this article does not contain detailed information about high power filters, the following observations are relevant to our search:

1.Often, using multiple interference reduction techniques, along with the use of receive-only band-pass filters is necessary. There is a good list of alternate (and somewhat complementary) interference reduction strategies. These include:
1.Wherever possible, use maximum separation between transmitters.
2.Where possible use opposite antenna polarization between transmitters, particularly those operating in different segments of the same band.
3.Low pass filters on HF stations will help isolate them from VHF stations.
4.Transmatches offer additional attenuation, particularly harmonics and spurs.
5.Shorted coaxial stubs are effective in reducing interference.
2.This paper suggests that Q-factors greater than 700 are necessary for the receive-only application.

In the literature surveyed, there are three alternate designs for high power band-pass filters. Gordon (Ref. 2) suggests a three-pole Butterworth design based on toroidal inductors. Wetherhold (Ref. 3 and 4) offers a similar approach based on a three-resonator Chebyshev filter design. These two approaches[1] are built into rather small metal boxes very similar to commercial low pass HF filters we see today.

Finally, the good folks at the Nashoba Amateur Radio Club (NVARC) (Ref. 5) suggest the use of three-stage, series-tuned resonators based on home-brew solenoid coils wound on PVC pipe stock. They claim their design is reproducible and should work as described without significant tuning. These are very low cost designs built into gutted PC power supply cabinets.

Interestingly, Zeringue (Ref. 6) rigorously compares the Wetherhold filters with the NVARC filters. Both have their good points; however, he winds up recommending the use of NVARC filters for SO2R station designs. His measurements indicate the NVARC filters have a bit more pass-band loss than the Wetherhold filters; however, their stop-band attenuation is significantly better, making them highly desirable in the Field Day application.

None of the filters considered are capable of isolating close-in stations operating on different segments of the same band, however. This observation suggests that we might re-layout our Field Day site to augment these filters. For this purpose it seems prudent to isolate, for each band, the CW station on one side of the field and the SSB station on the other side. This way, we can isolate each station from those working other bands by using the band-pass filter solution and then we can further isolate two stations sharing the same band by situating them apart with the maximum distance possible.

Additional information on filter analysis and design is given in the ARRL Handbook (Ref. 7). This material will be quite handy should we get to the stage where we might actually build one of these filters. Interestingly, at least one of the authors of the reviewed papers (Wetherhold) is a contributor to this reference material.

Final Recommendations

For next field day (2011), we should consider the following:

(a) Separating CW and SSB stations operating on the same band as much as possible by putting them on opposite sides of the 1000 foot circle. Note

1 Butterworth filters typically have a flatter pass-band characteristic than Chebyshev filters; however the Chebyshev filters have a much sharper roll-off characteristic leading to better isolation of the pass-band

this does not necessarily imply that we should put all CW stations on one side and all SSB stations on the other side of the field.

(b) Separate the 40M stations from other bands through the use of the NVARC filter designs.

We should then evaluate results from that operation with the view of determining whether there might be any gains constructing and using the NVARC filters on the other bands.

References

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- Reif, B. (W1XP) and Pozerski, S. (KD1LE), "The NVARC 'Ugly' Filter Project," http://www.n1nc.org/Filters/, 2005.
- Zeringue, K. (W4KAZ), "Band Pass Filter Fever – the Tangled Web – Parts 1 through 5," http://w4kaz.com/qth/?p=210, 2008.

And here is George (AA4GT) again! Not sure where this Bay County is (There is a Bay County in FL and one in MI, I am guessing FL)

Now here is a story that combines a number of things: Radio, an infamous murderer, the US and the UK! Hope you enjoy it.

Was Dr Crippen innocent of his wife's murder?

Hawley Crippen, the doctor hanged for the gruesome murder of his wife Cora, is one of the most infamous killers in British history. Exactly 100 years after his arrest, why is there a campaign to prove his innocence?

Having the surname Crippen does not endear you to UK Customs, according to a distant relative of the infamous doctor convicted of killing his wife.

James Patrick Crippen of Ohio, second cousin three times removed of Dr Hawley Crippen, hopes to officially exonerate the black sheep of the family and bring his remains to the family plot in Michigan for a decent burial.

"The evidence says the man should be pardoned," he says. "But everyone thinks of him as a murderer. Every time I have come through customs to England, someone has made a comment on my name, linking me to a murderer."

Crippen rose to infamy by allegedly poisoning and dismembering his wife, hiding her remains under the basement floor, and fleeing for North America with his lover - and then being the first person to be caught using the wireless telegraph.

The message was sent 100 years ago, and Crippen was arrested on arrival in Quebec on 31 July, 1910. His trial lasted only five days, and the jury's deliberations for less than half an hour.

The torso was identified as Cora Crippen's by a scar, the doctor was shown to have bought a large amount of the drug that killed her, and on his arrest he told Chief Inspector Dew: "I am not sorry; the anxiety has been too much."

The mild-mannered murderer became a national celebrity and his waxwork stands in Madame Tussaud's to this day. But was it all a huge miscarriage of justice? Was Crippen innocent after all? A growing body of people believe so, including family members and forensic scientists, and a campaign is under way to clear his name.

One line of evidence comes from John Trestrail, a toxicologist who has long puzzled over the mutilation of the corpse. The remains found were a torso without bones or sex organs.

Mutilation is extremely unusual behavior among poisoners, Mr Trestrail says. "A poisoner wants the death to appear natural so he can get a death certificate. This is the only case I know of where the victim was dismembered. It doesn't make sense."

'He finally cracked'

Mr Trestrail brought in Professor David Foran, director of forensic science at Michigan State University, who led DNA analysis on the scarred skin of the corpse used in the trial. It was demanding work over two years, retrieving tissue preserved in formaldehyde from the glass slide it was attached to with pine resin.

Mr Foran followed two lines of research and considers the results conclusive. First he isolated mitochondrial DNA, which remains unchanged throughout the generations down the female line. A genealogist found grandnieces of Cora Crippen who would have the same mitochondrial DNA as her, and repeated tests found they were not related to the body in the basement.

Then Mr Foran's team used new techniques to examine the nuclear DNA, and discovered a Y chromosome. Not only was the body not from Cora Crippen's family, it wasn't even a woman.

As Mr Trestrail sums it up, "This is the slide which Spilsbury [the expert witness at the trial] used to identify the body as Cora Crippen's. And this was the evidence on which Crippen was convicted. But the substance in the slide is not Cora Crippen. No question. I don't say Hawley Crippen is innocent, but he is no longer proven guilty."

Not everyone is convinced, however. John Boyne, whose book Crippen: A Novel of Murder, is to be reissued next year, says: "I think Crippen probably did kill his wife. His actions suggest guilt - his decision to flee the country and to dress Ethel LeNeve as his son rather than allow her to reveal her true identity on the ship as his lover. Cora made his life so miserable that I think he finally cracked."

Jonathan Menges, a writer and genealogist from San Diego, has written disputing Mr Foran's findings. Mr Menges claims the genealogy linking the living relatives to Cora Crippen is flawed - no birth certificate for her exists, for example, as they were rare in the US at the time - making the mitochondrial DNA tests irrelevant.

He criticizes the proceedings for having too much of an eye for showbiz - the nuclear DNA findings were first revealed on a TV documentary - and points out that they have not yet been published or peer-reviewed. He says that Crippen's behavior demonstrates his guilt, and that a group in Salt Lake City are investigating the mysterious disappearance there of Crippen's first wife. "There is no doubt that Crippen is guilty," he says.

Mr Foran responds that his work is to be published in the Journal of Forensic Sciences, that he is fully satisfied by the genealogy, and that the remains are indisputably male.

"I don't really care one way or the other whether the body was Cora Crippen's, I have no interest in clearing Crippen's name. What I care about is being right. We tested and

tested and tested, and if I had any doubts whatsoever I would never have come out with it. The body is not Cora Crippen's."

Nevertheless, JP Crippen has failed to get the case reopened. The Criminal Cases Review Commission declined to refer it to the Court of Appeal, because he is too distant a relative to have sufficient interest.

But Mr Trestrail agrees with him that the campaign to clear his name should continue.

"It matters," he says. "Justice doesn't have a time limit."

Crippen's house in north London has since been demolished

The role of wireless radio

- Captain Henry Kendall saw through Crippen's disguise as the doctor boarded his ship with his lover dressed as a boy
- The SS Montrose was one of very few Canadian Pacific liners fitted with a Marconi wireless radio
- Kendall had the operator wire the White Star Line Offices in London
- The message read: "Have strong suspicions that Crippen - London cellar murderer and accomplice are among Saloon passengers. Mustache taken off - growing beard. Accomplice dressed as boy. Voice manner and build undoubtedly a girl."
- British police caught a faster ship to Quebec and were there for Crippen's arrival

Trading Post

Nothing this month.

Club Information

Meeting Time: 4th Tuesday 7:00pm Golden Gate Community Center
4701 Golden Gate Parkway
Naples FL

Club Repeater: WB2QLP
146.670 (-600) PL 136.5
EOC Repeater:WB2WPA
147.030 (+600)

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