

The HIARC Bulletin

December 2019 Edition

The Official Bulletin of the Harris-Intersil Amateur Radio Club

Club Meetings: Second Thursday of each month at Meemaw's Barbecue on Babcock Street between Palm Bay Road and Port Malabar Road. Supper is at 6:00 PM, business is at 7:00 PM. Our programs start about 7:30 PM. As some members have allergies, we kindly ask that you refrain from wearing fragrances thanks.

Club Station: Building 15, Room 321. E-mail Butch for access.

Repeaters: K4HRS, 145.47 Mc, tone 107.2 cycles, elevation 170 feet, Melbourne

HIARC Web Site: www.qsl.net/hiarc. Website administrator; Jim , KC7SSW

Officers: President: Francis ("Butch"), WA4AQV

Treasurer: Bill WA4EMU

Secretary: Open

Repeater Chairmen: Bud W4HXP

Program Chairman: Open

Field Day Chairman: Bill WA4EMU

Sunshine Chairman: Open

Club Jester: Ken N8KH

Membership:

All welcome to join.

Dues are \$12.00 per year to:

Bill WA4EMU

Annual Events: Annual swapfest at the October meeting. Field Day (always the fourth full weekend in June)

Selected Hamfests:

- Orlando Hamcation, February 7 – 9, 2020 <https://www.hamcation.com/>
- Orlando Swapmeet, January 4, 2020 <http://www.arrl.org/hamfests/k4kdi-winter-tailgate>
- UCF Swapmeet, January 11, 2020 TBD, <http://newton.i2lab.ucf.edu/wiki/Tailgate>
- Stuart, March 21, 2020 <https://www.mcaraweb.com/event-3528517>

Ham Radio Lunches:

- Every Friday, 10:30 AM till 12:30 PM or so, Golden Corral on Palm Bay Road in Palm Bay
- Every Friday, 9:00 AM till 11:00AM or so, Umpa's Diner, 1115 N Courtenay Pkwy, Merritt Island, FL 3295, (321) 454-3422

July President's Message

The December Meeting will be this Thursday December 12, 2019 at Meemaws Barbecue on Babcock Street at 6 PM. We will have the annual Most Worthless Gift Exchange. No need to wrap it up a paper bag will do. Years past we have the soldering iron with no handle, chocolate covered electronic components, big bag of unknown keys, snarled Christmas lights, etc. There will not be a program at the December meeting so we can be social / merry. See you there.

73's

Butch WA4AQV

Our HF Bands Are Being Interfered With Again

Over the horizon radars are back at HF: <http://www.ARRL.org/news/russian-oth-radar-now-reported-to-be-everywhere#.XctJN1KpeB4.twitter>

73,
Ken N8KH

Amateur Radio May Lose 3.3 GHz Band

<https://docs.fcc.gov/public/attachments/DOC-360941A1.pdf>

In order to fulfill the congressional MOBILE NOW act the FCC is proposing to *entirely* eliminate our amateur allocation at 3 GHz (3.3-3.55 GHz to be specific) to make much spectrum available for 5G mobile phone systems.

If enacted as proposed, this would be catastrophic for the weak signal community that is now on 3456 MHz. This is a quiet band for amateurs that is not shared with WLAN or part 95 ISM. The 3.3 GHZ band includes a worldwide amateur space allocation as well.

The Notice of Proposed Rule Making is scheduled for December 12 as WT Docket 19-348. Here is a link to the FCC proposal: <https://docs.fcc.gov/public/attachments/DOC-360941A1.pdf>.

To oppose the spectrum grab you can act by filing comments at <https://www.fcc.gov/ecfs/filings> . Type 19-348 in the first entry field to direct the comments properly.

The ARRL news release is at <http://www.arrl.org/news/arrl-to-oppose-proposal-to-eliminate-3-3-3-5-ghz-amateur-allocation>.

Currently the public has access to this spectrum for free by amateur radio license. If enacted the public will have to pay mobile charges to big business.

The GAP Antenna

Many people ask me how the GAP antennas work.

The simple answer is that GAP antennas are vertically oriented dipoles with somewhat atypical impedance matching features to allow multiple band coverage. There are sleeves, stubs, folds, tuning rods, hats, distributed elements, and what-you-muh-call-its.

How to learn more? The GAP antenna approach was patented in 1997 to George Henf of Fellsmere, FL as US Patent # 5,592,183 titles "GAP Raidiated Antenna". This patent is most informative if read. A picture of the front page follows:



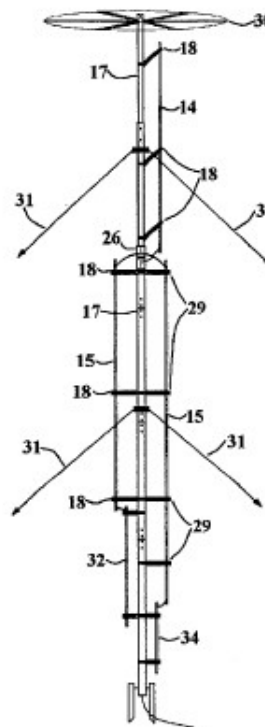
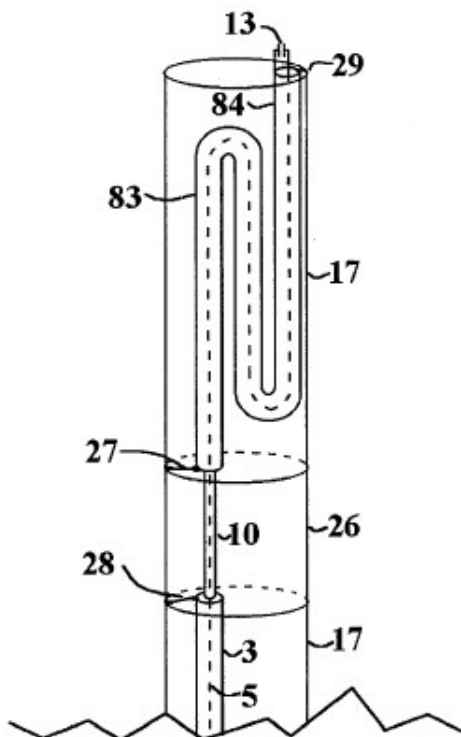
US005592183A

United States Patent [19]
Henf**[11] Patent Number: 5,592,183**
[45] Date of Patent: Jan. 7, 1997**[54] GAP RAIDATED ANTENNA****[76] Inventor: George Henf**, 174 Chaloupe Terr.,
Sebastian, Fla. 32958**[21] Appl. No.: 151,353****[22] Filed: Nov. 12, 1993****Related U.S. Application Data****[63]** Continuation-in-part of Ser. No. 852,751, Mar. 17, 1992,
abandoned, which is a continuation of Ser. No. 593,284, Oct.
3, 1990, abandoned, which is a continuation of Ser. No.
280,743, Dec. 6, 1988, abandoned.**[51] Int. Cl.⁶** H01Q 9/38**[52] U.S. Cl.** 343/749; 343/791; 343/830**[58] Field of Search** 343/749, 752,
343/790-792, 825, 829-831; H01Q 9/00,
9/04, 9/30, 9/32, 9/38, 9/22**[56] References Cited****U.S. PATENT DOCUMENTS**

2,297,512 9/1942 Von Baeyer 343/791

2,486,597 11/1949 Greene 343/791
4,369,449 1/1983 MacDougall 343/790**FOREIGN PATENT DOCUMENTS**2621341 11/1977 Germany 343/791
2814597 10/1979 Germany 343/790*Primary Examiner*—Michael C. Wimer
Attorney, Agent, or Firm—Malin, Haley, DiMaggio &
Crosby, PA**[57] ABSTRACT**

An antenna for broadcast and reception of electromagnetic waves in which all or a portion of the radiating structure is formed from coaxial cable or a functional equivalent thereof in which an annular opening exists, allowing alternating electrical current to propagate onto the outer surface of said radiative structure, thereby generating electromagnetic radiation.

5 Claims, 9 Drawing Sheets

The pictured antenna seems like a GAP Voyager possibly. Here is a link to read the whole patent for yourself:

<https://pdfpiw.uspto.gov/.piw?PageNum=0&docid=05592183&IDKey=51BED1EF6BBE&HomeUrl=http%3A%2F%2Fpatft.uspto.gov%2Fnetacgi%2Fnph-Parser%3FSect1%3DPTO2%2526Sect2%3DHITOFF%2526u%3D%25252Fnetahml%25252FPTO%25252Fsearch-adv.htm%2526r%3D1%2526p%3D1%2526f%3DG%2526l%3D50%2526d%3DPTXT%2526S1%3D5592183.PN.%2526OS%3Dpn%2F5592183%2526RS%3DPN%2F5592183>

We will probably have another meeting program on this antenna before long.

How To Radiate With Broken Waveguide

I can't believe I worked you through that piece of broken waveguide.....

http://www.Ham-Radio.com/sbms/brokn_guide/broke.html

Ken N8KH

A bunch of interesting ham topics, products, etc., not just band plan:

<https://qrznow.com/amateur-radio-band-plan/>

73,

Robin