



# *PARTicles*

The newsletter of PART of Westford, MA – WB1GOF

September 2012

## President's Column

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- *Andy Stewart*  
(KB1OIQ)

With help from Alan (W1AHM) and Rick (W1RAG), we cranked out the latest batch of 40 QSL cards for K2H. That brings our total up to about 400 QSL cards that we've sent out. Thanks, Alan and Rick, for your help!

The voting members of the PART Board of Directors held a brief meeting recently and nominated Rick (W1RAG) Green as our Director at Large for the 2012-2013 year. Rick has served in this role for a few years. Congratulations and many thanks to Rick for his continued willingness to serve PART.

The nominations are closed for this year's election for the PART Board of Directors. Since there were no contested offices, there is no need for an actual election. For the 2012-2013 year, your President will be Andy (KB1OIQ) Stewart, Vice President Rich (AB1HD) Crisafulli, Secretary Steve (WA1KBE) Rimsa, and Treasurer Alan (W1AHM) Martin. Congratulations and thank you for your willingness to serve PART, and thanks go out also to Alan (K1ALL), our Nominations Chairman.

For those of you who attended the Show 'n Tell meeting, you might remember the satellite rotator that I built. I have refined it so that the antenna movement isn't quite so "abrupt" by reducing the motor voltage to 6.5Vdc. I also modified the Arduino microcontroller software that receives

commands from the computer. Finally, I've got it working under control of a Linux program called Gpredict, which tracks the satellites and tells the rotator where to aim the antenna. After several attempts, and a variety of glitches which I think I've fixed, I finally successfully heard SO-50 and AO-27 (but have not yet had a valid QSO). I hope that very soon, I can put a few QSOs in the log! I will keep trying!

At the September meeting, our guest speaker will be Dennis (K1LGQ) Marandos. Dennis will be speaking to us about the New England QRP Club, their activities, their kits, and QRP in general. For more information, take a look at <http://www.newenglandqrp.org>. The excitement is building!

Boxboro has come and gone for 2012. I was pleased to see so many PART members at the convention. PART was well represented in the volunteer ranks as well as having a few members participate as speakers. I was pleased that about 75 people attended my Linux and Ham Radio talk. Fred (AB1OC) and Anita (AB1QB) reported to me that about 40 people attended their Bora Bora DXpedition talk. Ernie (N1AEW) gave a talk for AMSAT which also had pretty decent attendance. To my surprise, I won a hardcover copy of the ARRL Antenna Book as a door prize at the Friday night dinner. Ernie (N1AEW) won a balun at the closing meeting. Geoff (KB1USE) operated the W1A station and made a few QSOs. Bring

your Boxboro stories to the next meeting and let us know how much fun you had! In 2014, the convention will move to Hartford, CT to commemorate the 100 Year Anniversary of the ARRL.

There are a couple of public service events which are in need of volunteers. The Grace Race in Chelmsford needs about 6 more volunteers, and will be

held on Saturday morning, September 29th. If interested, please contact Andy at kb1oiq@arrl.net. Don't forget that Pumpkin Patrol happens every year on Halloween night, so stay tuned for more details.

Have a lot of fun, and 73!



### Episode 20

**Meet**

**DVDongle Inventor  
Robin Cutshaw AA4RC  
September 12, 2012**

**Robin Cutshaw AA4RC** is most famous (in D-STAR circles) for inventing the **DVDongle**, and then the **DVAP**. Get to know Robin, and learn how he got started in D-STAR in this in-depth conversation with KN4AQ.

### Episode 19

**AMSAT**

**Going to MARS?  
September 5 2012**

There's a lot going on at **AMSAT**, as their President Barry Baines WD4ASW tells Gary in this in-depth interview. So are they going to Mars? Maybe....

### Episode 7

**DMR**

**Digital Mobile  
Radio**

**April 4, 2012**

Not everyone is waiting for Yaesu to introduce their line of digital voice VHF/UHF equipment. A few thousand hams are already using the DMR protocol with business band equipment brought into the ham bands, complete with repeaters and world-wide networks.

*Next PART Meeting – Sept. 18<sup>th</sup> 7:30 PM-  
Dennis-K1LGQ on the New England QRP  
Club  
@ the Westford Police Station*

## Upcoming PART Meetings/Events

### September 18<sup>th</sup>, 2012

- PART Meeting. 7:30 -9 p.m. Westford Police station - **CLUB ELECTIONS!**

### October 6<sup>th</sup>, 2012

- PART monthly breakfast. Westford Regency. 8-10 AM (\$14/\$9; kids: \$8 – see article below)

### October 16<sup>th</sup>, 2012

- PART Meeting. 7:30 -9 p.m. Westford Police station

## Monthly PART Events

- Every Sunday, 8 PM – PART Net on 146.955 repeater
- Every 3<sup>rd</sup> Tuesday, 7:30 PM – PART Meetings at Westford Police station
- Every 1<sup>st</sup> Saturday, 8 AM, Regency Inn Westford – PART Monthly Breakfast
- Every Wednesday, 6 AM, Owl Diner Lowell – Breakfast

## Treasurer's Report

### PART Treasury between 17-July '12 and 20-August '12 (As of 20 August '12)

	General Fund	Repeater Fund	Checking Total
Old Balance	\$2,9743.40	\$1,429.50	\$4,402.90
Income	\$108.00	\$6.00	\$114.00
Expenses	(\$190.66)	(\$0.00)	(\$190.66)
Net	(\$82.66)	\$6.00	(\$76.66)
New Balance	\$2,890.74	\$1,435.50	\$4,236.24

### PART 2012 Membership as of 5-September '12

	Individuals (= New for 2012 ( + Renew for 2012)	Households (= New for 2012 ( + Renew for 2012)
Full (\$25)	46 (= 15 + 31)	46 (= 15 + 31)
Senior (\$15)	33 (= 6 + 27)	33 (= 6 + 27)
Family (\$30)	19 (= 4 + 15)	9 (= 2 + 7)
Student (\$15)	0 (= 0 + 0)	0 (= 0 + 0)
Associate (\$10)	2 (= 2 + 0)	1 (= 1 + 0)
Grand Total	100 (= 27 + 73)	89 (= 24 + 65)

\* Starred lines denotes changes since last report

#### Latest new PART members

(none)

\* To pay dues \*

PART, P.O. Box 503, Westford, MA 01886-0015

-or-

Club Meeting, Westford P.D., 7:30PM, 3<sup>rd</sup> Tuesday

## PART Annual Elections!

Nominations were closed on August 24th and we have only one candidate for each office. They are:

President: Andy Stewart - KB1OIQ  
Vice President: Rich Crisafulli – AB1HD  
Secretary: Steve Rimsa - WA1KBE  
Treasurer: Alan Martin - W1AHM

Because the club does not allow nominations from the floor, these will be our esteemed leaders for the coming year. Congratulations and thank you to each of them.

73,  
Alan - K1ALL  
Nominating Committee Chair

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Hi Everybody,

Along similar lines, we held a brief meeting of the voting members of the PART Board recently. We nominated and elected Rick Green (W1RAG) Green as our Director at Large. Congratulations to Rick and many thanks for your continued willingness to serve PART in this role.

Have a lot of fun, and 73,

Andy – KB1OIQ  
PART President



## Technology

### Learn about the Expandable Radio Control System

#### *Bob Stone, N1KMA of Newfield Design*

Newfield Design based in West Newfield, ME has developed a unique repeater control technology that has a wide-ranging implication in both the Amateur and Commercial radio markets. Bob, Chief Technology Officer and inventor of this technology will explain the capability of the

Expandable Radio Control System (ERCS) and their upcoming product can support a large number of communication protocols. The ERCS makes the repeater behave like a chameleon that can handle an analog call at one moment, DMR at the next moment, then D-STAR after that. Talk about making good use of your repeater, this can't be much better! All of this is done by a patented Digital Signal Processing (DSP) solution created by Bob Stone.

Location: Holiday Inn Boxborough Woods, Boxborough, MA, just off I-495 at Exit 28, Route 111.



You do not need to be an MMRA member to attend

## ***New England Area Ham/Electronic Fleas:***

<http://web.mit.edu/w1gsl/Public/ne-fleas>

### 2012

15 Sept Forestdale RI RIAFMRS @VFW \$5/Sp@8 Rick K1KYI 401 864 9611  
15 Sept Windsor CT VR+C Mus 115 Pierson LN @8AM Outdoor John 860 673 0518  
16 Sept Cambridge MA FLEA at MIT Nick 617 253 3776 F  
22, 23 Sept Wakefield MA Photographica @AmericalCtr ~photo~ John 781 592 2553  
29 Sept Center Conway NH WMARC @RecCtr \$5@8:30 Thaire W2APF 603 447 2376 +  
6 Oct Greenwoodd NS GARC @CommCtr \$4@10 S@8 Guy VE1NC 902 825 6151 R+  
7 Oct Wallingford CT Nutmeg John N1GNV 203 440 4973 T+  
12, 13 Oct Deerfield NH NEARFest XII @FG Mike K1TWF 978 250 1235  
14 Oct Queens NY HoSARC @HoS Stephen WB2KDG 718 898 5599 A  
20 Oct Longueuil PQ CRAR-SdeM \$7@9 +\$10/T@6 Guy VE2GGY 450 679 2318 R+  
21 Oct Cambridge MA FLEA at MIT Nick 617 253 3776 F  
27 Oct Gales Ferry CT TCARC Auction @FireCo @10 Darryl WA1DD 860 443 7799 T  
28 Oct Hicksville NY LIMARC @LevitHall Richard K2KNB 516 694 4937 A  
2 Nov Feeding Hills MA HCRA Auction @CongCh @6:30PM Jim KK1W 413 237 4666  
3 Nov Bourne MA FARA @UpperCC VoTech \$5@9 \$10/S@7 Ralph N1YHS 508 548 0422 F  
3 Nov Londonderry NH IRS @Lions \$3@8 S@6 Chris KB1QVM 603 434 6137 F+  
1 Dec Windsor CT VR+C Mus 115 Pierson LN @8AM Indoor John 860 673 0518

### 2013

16 Feb Marlboro MA AARC @MidSc \$5@9 \$20/T@7 Timothy KA1OS 508 919 6136 T+  
2 Mar Feeding Hills MA MtTARA @TurnverneinClb Mary N1TOY 413 222 1990 +  
1 June Hermon ME PSARA @HS \$5@8 Jerry K1GUP 207 848 3400 +  
15 June Newington CT NARL @StMarySch \$5@8 \$15/T Vinnie W1VJA 203 987 2108 +

## **Repeater Nets**

**146.955 Nets – There are a number of nets that are regularly scheduled on the 955 repeater.**

- Sunday night at 2000/8:00 PM Sunday Night PART Net – every
- Sector 1C Emergency Communications Net – this net occurs the 1<sup>st</sup> Monday or every month (except when it is a holiday).  
Skywarn and ARES Nets – these nets are spontaneous when local conditions warranted.

NOTE: You can LISTEN ONLY to this repeater audio by linking to this URL:

<http://www.radioreference.com/apps/audio/?feedId=10933> (effective 2/2012)

**442.450 D-Star Nets – There are a number of nets that are regularly scheduled.**

- Sunday 8:00 PM [Ozark Mtn D-STAR Net](#) – Reflector 001C
- Tuesday 8:00 PM [New England Amateur D-STAR Net](#) – Reflector 010C

NOTE: The Port B node (442.450) is connected to [REF010C](#) Mon – Fri from 10:00 am until 3:30 pm. The Port C node (145.330) is connected to [REF050C](#) Mon – Fri from 10:00 am until 3:30 pm. Users can LISTEN ONLY to D-Star Reflector 10C by linking to this URL: <http://www.radioreference.com/apps/audio/?feedId=5031>





## Securing Your Wireless Network -- *pdf*

Wireless networks are not as secure as the traditional "wired" networks, but you can minimize the risk on your wireless network (at home or at work) by following the tips listed in the PDF.



In keeping with tradition at both the federal and state level, Governor Patrick has once again proclaimed October as Cyber Security Awareness Month.

All Massachusetts citizens are invited to declare their commitment to using good practices for staying safe on the Internet by taking the [Cyber Security Pledge](#)

The pledge campaign - hailed as a friendly competition between states - has been launched by the Multi State Information and Analysis Center (MS-ISAC) to raise awareness of cyber security best practices.

The pledge outlines key behaviors that users should take to protect themselves and their information, both at home and in the workplace. The pledge also encourages users to take action by spreading the message of good cyber security practices to their friends, co-workers, neighbors, and communities. The pledge contest runs through October 31 and is one of the many activities underway in recognition of October as [National Cyber Security Awareness Month](#).

Help make Massachusetts - a charter member of MS-ISAC - proud by < taking the [Cyber Security Pledge](#) and [watch](#) the number of pledges rise throughout the month!

## Monthly PART Breakfast

Don't forget the monthly PART breakfast the 1st Saturday of each month at the Westford Regency Inn at 8 AM. The full hot & cold buffet breakfast costs about \$14 (includes tip) per person, a cheaper, lighter fare is available for adults and children. **NOTE: PLEASE let the folks who are settling the bill with the staff know whether you had a full or continental breakfast!**

## Monthly Breakfast Pricing

The full breakfast is  $\$10.95 + 18\% + 6.25\% = \$14.00$  (rounded up slightly). This price is unchanged. Here is the math for completeness and full disclosure.

*Continental breakfast: \$9.00 (new price)*

*Full breakfast: \$14.00 (same price)*

*Kid's breakfast: \$8.00*



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Robert Schmeichel  
2011

## Event



## Purpose

To allow the worldwide D-STAR community to come together for the annual D-STAR QSO PARTY.

## Prizes

The goal of the D-STAR QSO PARTY is to communicate through as many D-STAR repeaters as possible throughout the world. All operators who submit an approved log will be eligible for the prize draw. Seven (7) winners will be randomly selected to each win a prize. The more D-STAR QSO's you make, the more chances you have to win (up to a maximum of four prize draw tickets). Please refer to the entry multipliers below.

To qualify for a prize draw ticket, you need make a contact through at least one repeater in your own country.

If you contact amateurs in more than 5 foreign countries, you will qualify for two tickets to win a prize.

If you contact amateurs in more than 10 foreign countries, you will qualify for three tickets to win a prize.

If you contact amateurs in more than 20 foreign countries, you will qualify for four tickets to win a prize.

# ARRL News

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The American Radio Relay League (ARRL) is the national association for amateur radio, connecting hams around the U.S. with news, information and resources. URL: <http://www.arrl.org>

## Surfin': Whacking Radios

◆ American Radio Relay League | Ham Radio Association and Resources 9/14/12  
2:46 PM

By Stan Horzepa, WA1LOU Contributing Editor

This week, Surfin' discovers a new way of fixing radios.

I won a **Radio Shack Realistic Astronaut 8** circa 1972 multiband receiver at an auction for \$1 a few years ago. It had minor cosmetic wear and tear, but functioned like new after I sprayed all the switches and pots with an electronics cleaner.

## ARRL to Welcome USTTI Students in October

◆ American Radio Relay League | Ham Radio Association and Resources 9/13/12  
4:55 PM

Next month -- October 1-5 -- the ARRL will welcome eight international students who want to learn how to administer and regulate Amateur Radio programs in their home countries. This course, offered by the United States Telecommunications Training Institute (**USTTI**) for learners from developing countries, will help the participants create, administer and foster an Amateur Radio Service in their c...

## Three Hams Return to Earth this Weekend; Watch Live on NASA TV

◆ American Radio Relay League | Ham Radio Association and Resources 9/12/12  
1:16 PM

After spending 125 days in space, NASA Flight Engineer **Joe Acaba, KE5DAR**, **Expedition 32** Commander **Gennady Padalka, RN3DT**, and Flight Engineer **Sergei Revin, RN3BS** (both of the Russian Federal Space Agency) will begin their voyage home to Earth this weekend, marking the end of **Expedition 32** on board the International Space Station (**ISS**). The trio will undock their Soyuz TMA-04M spacecraft on Sund...

## Get Set for the 2012 Simulated Emergency Test

◆ American Radio Relay League | Ham Radio Association and Resources 9/11/12



12:49 PM

Are you ready to respond to a local communications emergency? How about within your area, state or beyond? The ARRL Simulated Emergency Test (SET) -- an exercise that enables you and your local, District and Section leaders to test equipment, modes, operating skills and emergency deployment plans to see if everything is in place and ready for an actual emergency event -- is October 6-7, 2012. T...

## ARRL Welcomes NASA Astronaut Lee Morin, KF5DDB, to 2012 National Convention



[American Radio Relay League | Ham Radio Association and Resources](#) 9/10/12

5:03 PM

NASA Astronaut Lee Morin, KF5DDB, will be a special guest at the **2012 ARRL National Convention** at Pacificon -- held October 12-14 -- in Santa Clara, California. Morin, an ARRL member, served as a Mission Specialist on Atlantis for **STS-110** that launched in April 2002. During this 13th shuttle mission to the International Space Station (**ISS**), he performed two extra-vehicular activities (**EVA**s) -- ...

## Newly Elected Section Managers to Converge in Newington



[American Radio Relay League | Ham Radio Association and Resources](#) 9/10/12

2:53 PM

This weekend, 12 newly elected or appointed Section Managers will be in Newington at ARRL Headquarters for an orientation workshop. The primary purposes of the three-day workshop sessions are to share ideas and to provide basic administrative, management, leadership and motivational training.

"The Section Manager Workshop is an orientation and training event for new Section Managers who have co...

## Becky Schoenfeld, W1BXY, is New QST Managing Editor



[American Radio Relay League | Ham Radio Association and Resources](#) 9/10/12

2:01 PM

ARRL Book Editor Becky Schoenfeld, W1BXY, has been promoted to QST Managing Editor, the position formerly held by the late Joel Kleinman, N1BKE.

A Connecticut native, Schoenfeld has more than two decades of publishing experience. Prior to her employment at ARRL Headquarters she was Senior Editor at Teaching K-8

magazine, one of the most popular magazines for childhood educators, and Senior Proje...

## Everyone Can Enjoy DXing



[American Radio Relay League | Ham Radio Association and Resources](#) 9/7/12

5:57 PM

In just over 2 years of being a ham, the one thing I've found that I can do for hours on end without getting bored is DXing.

I've found that some hams think DXing is too hard, QSLing too expensive or that they don't have the right equipment. DXing is something that everyone can enjoy and nobody says that you have to QSL to be a DXer. Some DXers I've spoken with have logged over 200 countries but...



*Click the images to ta  
latest versions of thes  
products.*

### Special DXing Issue...

Build a shared apex loop array antenna to boost your receive performance.

Read about the fascinating HKØNA DXpedition to Malpelo Island.

Get tips on how to make the most of modern DX spotting networks.

Learn the real story of the historic 1954 DXpedition to Navassa Island.

Find out why so many amateurs are eager to make contact with the Sovereign Military Order of Malta.

...and much more!

### Enjoy Content You Won't Find in the Print Edition...

Watch video overviews of the Alinco DJ-V57T and Kenwood TH-K20A handheld transceivers.

Listen to galactic noise on 10 meters.

See extra photos of the HKØNA Malpelo Island DXpedition.

Listen to the Hendricks QRP Kits Scout Regen receiver.



## Repeater Information

### Repeater Interference

The 146.955 repeater continues to see interference to existing conversations as well as at random quiet times throughout the day and night. The repeater interference committee needs your help in collecting data. If you hear any type of interference, please report the following info to **"repeater"** at **"wb1gof.org"**:



- Time: When did the event happen?
- Observing location: Where were you? Were you mobile?
- Frequency: Input only (146.355 MHz)
- What you heard: Voices, tones, kerchunking or whatever.
- Signal strength: Either by ear (noisy, quiet or full quiet) or S meter
- Radio: To get an idea of the reporter's radio situation.

\* Most important - what direction: How did you determine direction? This is the most essential piece of information. Even if it's an estimate as in "Roughly east" or "from the Northeast" it's useful. NEVER EVER reply or direct any thing to the sick person causing the interference. Because some of us have answered this person, he knows we are aware of him and that is what keeps him doing it. Also since you are communicating with a non IDing station you are operating just as illegally as he is. YOU ARE BROADCASTING! NEVER TALK ABOUT INTERFERENCE on air. NEVER

*If you are interested in assisting in helping us identify the sources of interference, contact Terry-KA8SCP.*

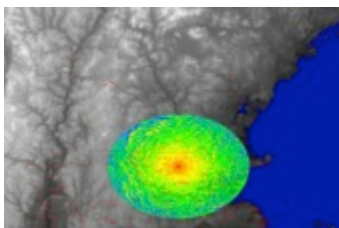
### EmComm events and repeater use

Most everyone knows that the 146.955 repeater is used during times of emergency situations, drills and exercises. Skywarn and the monthly EmComm drills are the normal events.

So what does this mean to those that are just looking for regular QSOs with other users? It means that if you are in a regular QSO and there is a significant weather situation that has been getting press/air-time lately, you can expect that if severe weather develops in our area, the folks from Taunton-WX1BOX may interrupt a QSO and ask anyone on frequency what may be happening weather wise. The BOX operator will probably ask for specific information, hail, wind damage, property damage from lightning or wind, etc. Please give him the information he needs or tell him that you've not heard of any such activity. You don't need to tell him it is sunny in Nashua!

There may come a time when an unexpected emergency situation arises. These will significant events that may affect life and property. This is where EmComm activity may step in. Usually an NCS will interrupt a QSO and announce the situation and ask for a QSO to cease or to be "aware" of the possibility of priority calls/traffic. Please make sure you leave breaks between transmissions so stations with traffic can get in between QSOs. If there is enough traffic, it may be necessary for your existing/interrupted QSO QSY to another frequency. You should use your best judgment or check with the NCS on what he feels is best.

If you have any questions, please feel free to correspond with either Hugh-N1QGE (Westford EmComm/Skywarn NCS) or Terry-KA8SCP (MEMA Region 1 Communications Officer and Skywarn NCS) . They will be more than happy to talk about these programs with you.



**R**epeater info is now available on the PART [website](#). Check out the links to the summit information as well as coverage and plot plans maps for the WB1GOF repeaters. Complete info on the site can be found at this [URL](#).

## PART Gear

The PART Quartermaster has lots of great PART-ware for sale including mugs and shirts. You can get information how you can obtain your PART-ware at the monthly club meetings.

Club members are also encouraged to obtain an official PART badge from [The Sign Man](http://thesignman.com/clubs/part.html) (<http://thesignman.com/clubs/part.html>) PLEASE NOTE: There is a new PART badge available if you'd like to order one. Price for badge is \$15 which includes shipping and handling.



## EmComm

**Emergency Communications** – The WB1GOF 146.955 repeater is used on the first Monday of every month (except federal/state holidays) for an EmComm Net starting at 1930 local time. If you are interested in being part of the local emergency communications team in your community, feel free to contact any of the following folks:

Terry Stader – KA8SCP, MEMA Region 1 Communications Officer  
Hugh Maguire – N1QGE, for the Town of Westford

Bill Ohm – W1OHM, for the Town of Chelmsford

- We need radio operators that can pass messages on to the local emergency management directors in several towns in northern Middlesex County.

**Skywarn** - The WB1GOF 146.955 repeater is also used for reporting significant weather events to the National Weather Service from our local spotters. We expect to have a local Skywarn training class in 2010, more information as it becomes available. You can provide valuable information even if you have not attended one of the training sessions. Listen to the Skywarn Net Control Station for reporting criteria, when you have information that qualifies, please advise him with your report.

**Situational Awareness** – Recently, the Massachusetts Emergency Management Agency has asked the Amateur Radio community to provide situational awareness and disaster intelligence information within your local community via EmComm nets and/or Skywarn stations. Significant events such as widespread power outages can be reported and by agencies such as MEMA to evaluate the scope of a blackout for example. Initially, you should try and contact the EmComm Net Control Stations on the Westford 146.955 repeater to pass this information. More on this new program will be forthcoming.

**PART Sunday Night Net** – The PART Net each Sunday night is an IMPORTANT part of our regional EmComm function. With each station that checks in from the surrounding communities, we test our ability to communicate vital information to the ham radio community. Sure we announce club info but we can also communicate regional disaster news and serve as a “hub” for news of situations in our communities. The repeater is on a generator, so even if we loose power in the region, an HT with a supply of batteries will reconnect you to other local hams.



PARTicles © 2012, a publication of PART of Westford, MA – WB1GOF

This month's editor: Terry Stader – KA8SCP

PART official mailing address is:  
PART, PO Box 503, Westford, MA 01886

Our website is: <http://wb1gof.org>  
Our forum is: <http://wb1gof.net/forums/>  
Contact us at: [info@wb1gof.org](mailto:info@wb1gof.org)  
Follow us on Twitter: [www.twitter.com/wb1gof](http://www.twitter.com/wb1gof)  
Like us on Facebook: [www.facebook.com/wb1gof](http://www.facebook.com/wb1gof)



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