

THE COMPASS



THE OFFICIAL NEWSLETTER OF THE GREAT SOUTH BAY AMATEUR RADIO CLUB

VOLUME 32 ISSUE 3

“..serving the community through Public Service.”

March, 2004

GSBARC 2004 OFFICERS

President: Walter Wenzel, KA2RGI
Vice Pres: David Wandell, N2UHR
Treasurer: Tom Carrubba, KA2D
Corr. Sec.: Scott Verity, KC2FBV
Rec. Sec.: Steve Schwenker, K2JY
Dir. 2004: Charles Rousselet, N2MZK
Dir. 2004: Jay Eichner, N2PIK
Dir. 2005: Dom Stengele, WA2UJI
Dir. 2005: Robert Smithline, N0UH

Upcoming GSBARC Events

Board Meeting – 2nd Thursday 8:00 PM

April 8
May 13
June 10

VE Session – 4th Sunday 12:00 PM

March 28
April 25
May 23

June – No Session because of Field Day

General Meeting – Last Thur. 8:00PM

April 29
May 27
June 24

Open House 12:00 – 2:00PM

Every Saturday @ Town Hall EOC

NETS

Newsline Report -

Monday 7:00 PM 146.685/R

Club Info Net -

Monday 7:30 PM 146.685/R

DX/Contest Info -

Monday 8:00 PM 146.685/R

TOBARES Net -

Monday 8:15 PM 146.685/R

Swap ‘n Shop Net -

Tuesday 7:30 PM 146.685/R

10 M Net -

Tuesday 8:00 PM 28.320

REPEATERS

2 M 146.685/146.085 PL 110.9
1 1/2 M 223.860/222.260 PL 131.8
70 CM 440.850/445.850 PL 114.8

President's Message

By Walter, KA2RGI

AHH, SPRINGTIME!

Springtime, the time that one's mind goes into full bloom attempting to plan a course of action for the next 6 – 8 months. All of the desire and so little time.

Here it is another month of the year gone by. Farewell to Winter. The season is finally starting show it about release its grip on us, even inspite of what the calendar has to say. The temperature is getting warmer on the average. The flowers have started to peek out of the ground and are starting to bloom. This all leads to the annual thoughts of what you would like to do as the weather warms up to improve your ham station.

It is time for us to see what has to be done so we setup our schedules and plan those functions and events we want to do. Things like putting up that tower and beam we have wanted for so long. Working a few contests or that DX Expedition that we missed last time they were on, a few years ago and we did not have the operating privileges to work them. Attending a hamfest to maybe purchase that radio that you have so many times dreamed of owning and operating. You know it's the that is on the desk in the corner. The one in the plastic protector because you have drooled over it so much it has almost fallen apart. Yeah that one. Maybe you are planning to convert the room of the harmonic that just went off to college into a radio shack. Maybe all you are planning is how to build that multi level radio bench so you no longer have to operate from the folding table next to the dryer. So many radio to projects to plan. Now comes the toughest issue of all. How do I schedule them with all of the other honey do's on the list that the significant other has? Well that is another matter that is just as complex as quantum physics. I wish you well in you mission.

Oh buy the way talking about planning things to do, if you have not already done so, tax time is near do not be caught short this year. Prepare those tax forms now if you have not done so already.

Happy Birthday

N2RBO, Joe
K2TAT, Robert
N2YAY, Cleo
KB2TXZ, Gene
N2NGE, Brian
KA2CAQ, Walter
KB2QFZ, Bruno
KC2KMD, Robert
WA2UJI, Domenick
N2PLT, George

If your birthday is not listed we may not have all the info in our database

CLUB STATION AND EQUIPMENT: Chairperson – Walter, KA2RGI
Nothing new to report.

DX & CONTESTING: Chairperson – Tom, KA2D
Nothing new to report

DX CLUSTER: Chairperson – Tom, KA2D
Cluster-up and running and nothing new to report.

EDUCATION: Chairperson – Walter, KA2RGI
Next general class will be held on Tuesday Feb 17 at 7:30 PM.
Morse code classes will be held at Walter's new shop, 421 Broadway, West Babylon on Feb. 21.
Extra Classes are to start March 2 at TOB EOC at 7:30 PM.

LIBRARY: Chairperson – Dom, WA2UJI
Nothing new to report.

MEMBERSHIP: Chairperson – Tom, KA2D
Nothing new to report.

NETS:
We are looking for anyone that would be interested in helping out with the club info net on Monday nights. Back up control operators would be helpful. If you are interested, let us know and we will provide you with the standard script used for the net. The Tuesday night ten meter net and the swap and shop net would always appreciate more check ins.

Newsline Report: NCS – Dave, N2UHR Nothing new to report.
2 m Net: NCS – Dave, N2UHR Nothing new to report.
Swap n Shop: NCS – Bud, WA2QAV Nothing new to report.
10 m Net: NCS – Brian, N2NGE Nothing new to report.

NEWSLETTER – COMPASS: Chairperson – Gene, N2TZX

REPEATERS: Chairperson – Walter, KA2RGI
Nothing new to report.

SPECIAL EVENTS:
Field Day: Chairpersons – Position Open
We are looking for field coordinators to help with getting ready for field day. Any help would be appreciated.
Hamfest: Chairperson – Walter, KA2RGI
The hamfest will be held rain or shine on May 23, at the Massapequa Sunrise Mall, starting at 8 am and will end at 12 noon. Any help would be appreciated.
Air Power Museum: Chairperson – Bud, WA2QAV
Nothing to Report
Fire Island Lighthouse Weekend: Chairperson – Tom, KA2D
Nothing to Report
Club Picnic: Chairperson – Walter, KA2RGI
Nothing to Report
End of the Year Party: Chairperson – Walter, KA2RGI
Nothing to Report

VE SESSIONS: ARRL Liaison – Tom, KA2D
The next VE session is Feb. 22 at EOC.

WEBSITE - HOME PAGE: Chairperson – Tom, KA2D
Up and running, nothing new to report

SPECIAL COMMITTEES:
Antenna Committee: Chairperson – Open Position

News of Interest

Editors Note

If you have any topics or websites of ham or computer related interests you would like to see appear in the newsletter please email me at ehowley@optonline.net

MINUTES OF THE GENERAL MEETING BABYLON TOWN HALL EOC LINDENHURST, NY

Thursday February 26, 2004

Meeting called to order by Walter, KA2RGI at 8:00 PM

BOARD MEMBERS PRESENT:

| | | | |
|---------------------|--------|--------|----------|
| President | KA2RGI | Walter | Wenzel |
| Vice President | N2UHR | | David |
| Wandell | | | |
| Recording Secretary | K2JY | | Steve |
| Schwenker | | | |
| Director 2004 | N2MZK | | Charles |
| Rousselet | | | |
| Director 2004 | N2PIK | | Jay |
| Eichner | | | |
| Director 2005 | WA2UJI | Dom | Stengele |
| Director 2005 | N0UH | | Robert |
| Smithline | | | |

BOARD MEMBERS NOT PRESENT:

| | | | |
|-------------------------|--------|-------|--------|
| Treasurer | KA2D | Tom | |
| Carrubba | | | |
| Corresponding Secretary | KC2FBV | Scott | Verity |

OTHER CLUB MEMBERS PRESENT:

N2MIG, K2LI, N2GBM

PREVIOUS MINUTES: Recording Secretary - Steve, K2JY
Nothing new to report.

CORRESPONDENCE REPORT: Corresponding Secretary - Scott, KC2FBV
Nothing new to report.

TREASURER'S REPORT: Treasurer - Tom, KA2D
Nothing new to report.

COMMITTEE REPORTS:

APPERAL: Chairperson – Rob, N0UH
Nothing new to report.

Nothing new to report
Open House: Chairpersons – Dave, N2UHR
 Nothing new to report
Public Relations: Chairperson – Walter, KA2RGI
 Nothing new to report
Technical Committee: Chairperson – Walter, KA2RGI
 Nothing new to report
ARES/RACES: EC/RO – Walter, KA2RGI
 ARES cards will be available at the TOBARES meeting next week Feb. 19.
 March 28 - 7:00 AM to Noon - Suffolk County Half Marathon.

GUEST SPEAKERS & PROGRAMS: Chairperson – Dave, N2UHR
 Peter Penta, NA2P will be our guest speaker at the general meeting. His topic will be on satellite operations.

HEALTH AND WELFARE: Chairperson – Scott, KC2FBV
 Ryan, KC2LKS is home and recovering from his broken leg. We wish the best and hope to see him soon.

OLD BUSINESS:
 The 2004 budget will be discussed at the next general meeting, and a proposal to purchase a video projector for the club will also be discussed.

NEW BUSINESS:
 No new business was brought up.

MOTION TO ADJOURN:
 A motion to adjourn the meeting was made by Rob, N0UJH and seconded by Tom, N2MIG.
 Meeting was adjourned at 8:47 PM

Respectfully submitted by
 Steve Schwenker K2JY
 Recording Secretary



**MINUTES OF THE EXECUTIVE BOARD MEETING
 BABYLON TOWN HALL EOC LINDENHURST, NY**

**GREAT SOUTH BAY AMATEUR RADIO CLUB
 MINUTES OF EXECUTIVE BOARD MEETING**

BABYLON TOWN HALL EOC, LINDENHURST, NY

Thursday March 11, 2004

Meeting called to order by Walter, KA2RGI at 8:00 PM

BOARD MEMBERS PRESENT:

| | | |
|-------------------------|--------|-------------------|
| President | KA2RGI | Walter Wenzel |
| Vice President | N2UHR | David Wandell |
| Treasurer | KA2D | Tom Carrubba |
| Corresponding Secretary | KC2FBV | Scott Verity |
| Director 2004 | N2MZK | Charles Rousselet |
| Director 2004 | N2PIK | Jay Eichner |

| | | |
|---------------|--------|--------------|
| Director 2005 | WA2UJI | Dom Stengele |
|---------------|--------|--------------|

BOARD MEMBERS NOT PRESENT:

| | | |
|---------------------|-------|------------------|
| Recording Secretary | K2JY | Steve Schwenker |
| Director 2005 | N0UJH | Robert Smithline |

OTHER CLUB MEMBERS PRESENT:

KC2EXP, KC2EXO, K2LI, N2IMF

PREVIOUS MINUTES: Recording Secretary - Steve, K2JY

No minutes were taken at Jan. 29, General Meeting because of a lack of a quorum of Club Officers. No club business was able to be transacted.

CORRESPONDENCE REPORT: Corresponding Secretary - Scott, KC2FBV

Thank you was sent to NA2P for his talk, Sent N2KYP a letter to say HI, N2YAY and N2RBO are listening on unable to make evening meetings.

TREASURER'S REPORT: Treasurer - Tom, KA2D

| | |
|-----------|----------------|
| Checking: | 2136.26 |
| CD: | <u>2800.16</u> |
| Total: | 4936.42 |

COMMITTEE REPORTS:

APPERAL: Chairperson – Rob, N0UJH
 No Present.

CLUB STATION AND EQUIPMENT: Chairperson – Walter, KA2RGI

A discussion was held about buying another Kenwood 570 to add to the clubs existing equipment, a Kenwood TS 570 and a Kenwood TS 430. Steve, K2JY will be looking into the price of another unit and will report his findings to the membership at the general meeting. Bud has a 570 for sale.

DX & CONTESTING: Chairperson – Tom, KA2D
 Nothing new to report. Check into W2GSB DX Cluster and PBBS on 145.07 for latest info.

DX CLUSTER: Chairperson – Tom, KA2D
 Cluster-up and running and nothing new to report. During DX SSB contest cluster averaged over 800 spots for 48 hr. period.

EDUCATION: Chairperson – Walter, KA2RGI
 Extra class will be held on Tuesday Mar 16 at 7:30 pm. Morse code classes are being held at Walter and Joe's shop, 421 Broadway, West Babylon on Saturdays at 3:30 PM.

LIBRARY: Chairperson – Dom, WA2UJI
 Donated 2002 and 2003 QSTs. Club needs to purchase binders for QSTs.

MEMBERSHIP: Chairperson – Tom, KA2D
103 members Total, 80 Full, 13 Family, 4 ARRL, 6
Comp.

NETS:

We are looking for anyone that would be interested in helping out with the club info net on Monday nights. Back up control operators would be helpful. If you are interested, let us know and we will provide you with the standard script used for the net. The Tuesday night ten meter net and the swap and shop net would always appreciate more check ins.

Newsline Report: NCS – Dave, N2UHR Nothing new to report.

2 m Net: NCS – Dave, N2UHR Nothing new to report.

Swap n Shop: NCS – Bud, WA2QAV Nothing new to report.

10 m Net: NCS – Brian, N2NGE Nothing new to report.

NEWSLETTER: Chairperson – Gene, N2TZX

REPEATERS: Chairperson – Walter, KA2RGI
Nothing new to report on the problems with the 2 meter repeater. The 220 and 440 machines will be worked on as time permits

SPECIAL EVENTS:

Field Day: Chairpersons – Position Open
We are looking for field coordinators to help with getting ready for field day. Any help would be appreciated.

Hamfest: Chairperson – Walter, KA2RGI
The hamfest will be held rain or shine on May 23, at the Massapequa Sunrise Mall, starting at 8 am and will end at 12 noon. Any help would be appreciated.

Air Power Museum: Chairperson – Bud, WA2QAV
Nothing to Report

Fire Island Lighthouse Weekend: Chairperson – Tom, KA2D
Nothing to Report

Club Picnic: Chairperson – Walter, KA2RGI
Nothing to Report

End of the Year Party: Chairperson – Walter, KA2RGI
Nothing to Report

VE SESSIONS: ARRL Liaison – Tom, KA2D
The next VE session is Mar. 28 at EOC.

WEBSITE - HOME PAGE: Chairperson – Tom, KA2D
Up and running, Dec, Jan, and Feb Compass' on line.

SPECIAL COMMITTEES:

Antenna Committee: Chairperson – Open Position
Nothing new to report

Open House: Chairpersons – Dave, N2UHR
Nothing new to report

Public Relations: Chairperson – Walter, KA2RGI
Nothing new to report

Technical Committee: Chairperson – Walter, KA2RGI
Nothing new to report

ARES/RACES: EC/RO – Walter, KA2RGI
ARES cards will be available at the TOBARES meeting next week Feb. 19.
March 28 - 7:00 AM to Noon - Suffolk County Half Marathon.

GUEST SPEAKERS & PROGRAMS: Chairperson – Dave, N2UHR
No one is scheduled as our guest speaker at the general meeting.

HEALTH AND WELFARE: Chairperson – Scott, KC2FBV

OLD BUSINESS:

The 2004 budget will discussed at the next general meeting, and a proposal to purchase a video projector for the club will also be discussed.

NEW BUSINESS:

No new business was brought up.

MOTION TO ADJOURN:

A motion to adjourn the meeting was made by Jay N2PIK, seconded by Charles N2MZK.
Meeting was adjourned at 8:50 PM

Respectfully submitted by
Walter Wenzel for
Steve Schwenker K2JY
Recording Secretary

WebSite of the Month
Radio or computer related

Broadband over Power Line

InfoWorld

http://www.infoworld.com/article/04/01/07/HNbbroadbanddog_1.html

News.com

http://news.com.com/2100-1034_3-5163739.html

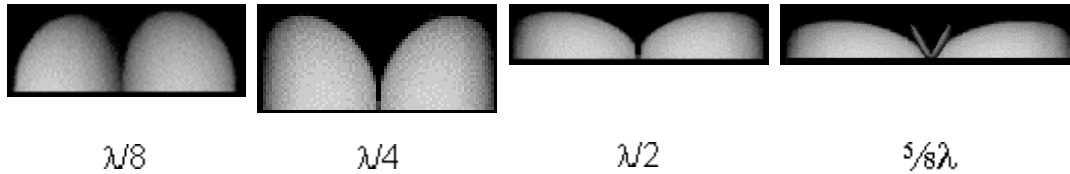
Algorythm

http://algorhythm.org/archives/2004/02/05/first_broadband_power_line_deployment_in_canada.html

Antenna Systems Part Two

Directional Effects of Vertical Height

As the height of whip (vertical) antenna vary, the radiation pattern is modified. Generally more height yields more vertical range, up to $\frac{5}{8}\lambda$, then the pattern becomes more horizontal. See the table below.

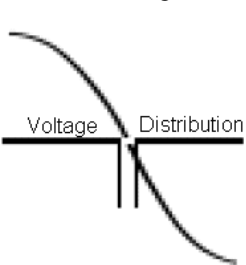


Dipole Antenna

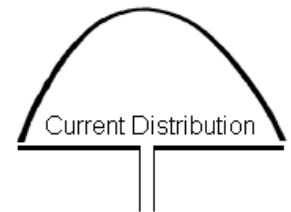
The dipole antenna appears as a metal rectangle on the end of a short mounting beam. The loop is the antenna itself often referred to as the driven element. It is probably the basic antenna for industrial fixed point communications and is mounted off the side of a structure. Its electrical construction and that it may be mounted well down a mast means that it has good lightning avoidance characteristics. It is also physically robust.

Dipole antenna are omnidirectional (non-directional) when vertically polarized and have a relatively low gain. They are not commonly used in horizontally polarized systems as the higher gain yagi antenna are of similar cost. For applications in corrosive environments (such as near the ocean) stainless steel dipole antenna are available and should be used.

The distance from the dipole to the structure is important. If mounted for vertical polarization ensure that the drain hole (if present) on one end of the dipole is at the bottom. If mounting for horizontal polarization it is normal for the insulated portion of the dipole to be the highest point for proper moisture drainage. This may vary dependent on method of manufacture. Failure to do so may result in eventual damage to the antenna.



Usually the length is cut to $\lambda/2$ and the antenna current and voltage distribution are antiphase to each other. The physical length is made 0.48 wavelengths due to the end effect. Recall the operation of a water hose. If you let the water flow from the hose orifice, the water flows in a stream slightly past the edge of the outlet. In an antenna the same thing happens to the current, it flows just past the ends of the antenna but is approaching zero. The voltage distribution has it's highest value just past the ends of the antenna.



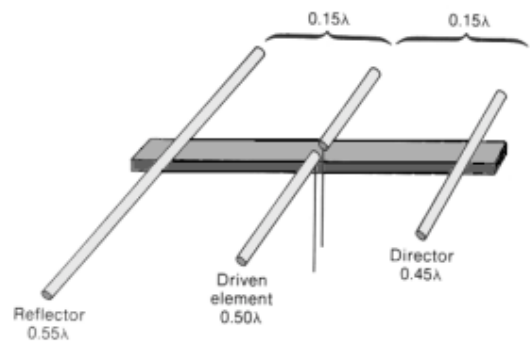
Yagi Antenna

A yagi antenna is essentially a dipole with directors and reflectors added before and behind the dipole. These reflectors and directors are simply metal rods of similar size to the dipole. They concentrate the energies into a "beam" in order to increase the gain. There is usually only one reflector and one or more directors. A yagi antenna is rated by its total number of elements. A yagi antenna may be considered as a directional form of a dipole antenna and the comments on the dipole antenna are applicable. If mounted for vertical polarization, ensure that the condensation drain hole (if present) on one end of the dipole is at the bottom. Failure to do so may result in eventual damage to the antenna. If mounted for horizontal polarization, ensure that the antenna feeder cable entry to the dipole element is at the bottom to allow condensation to drain.

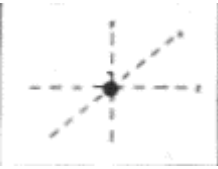
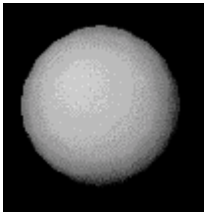
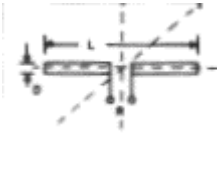
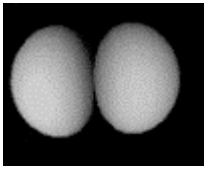
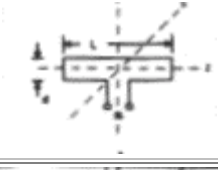
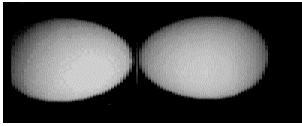
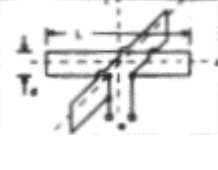
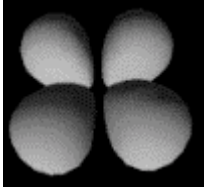
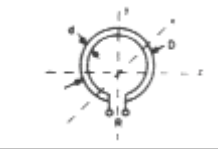
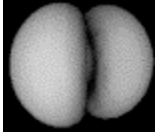

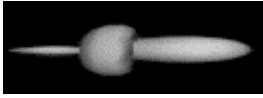
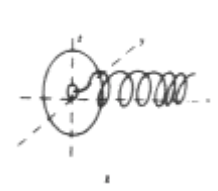


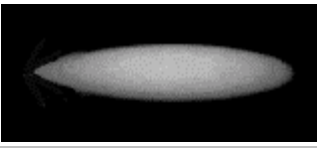
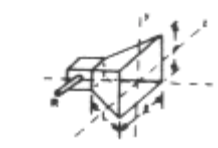
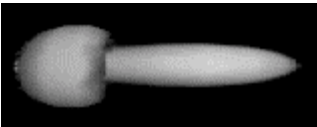
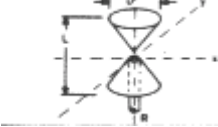
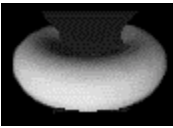
Large yagis are best center mounted rather than end mounted. Mounting a vertically polarized antenna centrally is not recommended as the mast is also vertical and will affect the antenna performance. If end mounting a large antenna it is best to use a bracket recommended by the manufacturer to avoid possible degradation of the antenna's characteristics.

Miscellaneous

Turnstile antennas take two dipoles and mount them 90 degrees to each other. It is a poor attempt to get an omnidirectional antenna. Many hobby electronics stores sell these for FM antennas, and they only work because the FM signal in the city areas is usually quite strong. The **full wave loop** is similarly used as a cheap antenna for TV, but it can be a good antenna. Direction finders many times use the loop antenna. The **folded dipole** has more gain than it's single element brother. It is also a full wavelength antenna folded up. The **helical antenna** is like a wound spring coil and may be clockwise or counterclockwise polarized. They can be good for general communications since they have both horizontal and vertical components. Space telemetry uses helical array antennas many times. **Parabolic** and **horn antennas** are used to obtain high gain and directionality.



Antenna Chart

| Name | Shape | Gain (over isotropic) | Beamwidth -3 dB | Radiation Pattern |
|---|---|-----------------------|--------------------|---|
| Isotropic |  | 0 dB | 360 |  |
| Dipole $\lambda/2$ |  | 2.14 dB | 55 |  |
| Folded Dipole $\lambda/2$ Cylindrical |  | 5.64 dB | 45 |  |
| Turnstile $\lambda/2$ |  | -0.86 dB | 50 due to cusps |  |
| Full wave loop $D = \lambda/\pi$ |  | 3.14 dB | 200 |  |
| Yagi $\lambda/2$ |  | 7.14 dB | 25 |  |
| Helical $L = 6\lambda$ |  | 10.1 dB | 30 |  |
| Parabolic Dipole $D = 5\lambda/2$ |  | 14.7 dB | 20 |  |
| Horn 3λ |  | 15 dB | 15 |  |
| Biconical Horn $H = 9\lambda/2$ $D = 14\lambda$ |  | 14 dB | 360x200 |  |

Great South Bay ARC

2004 Budget

EXPENSES FIXED

| | | |
|-------------------------------|----------------|------------|
| Annual PO Box Rental | \$50.00 | |
| Bank - Monthly Service charge | \$65.00 | |
| Club Equipment Insurance | \$155.00 | |
| Club Liability Insurance | \$325.00 | |
| Repeater Fund 2004 | \$500.00 | |
| Internet Domain Name | <u>\$35.00</u> | |
| | \$1,130.00 | \$1,130.00 |

Membership/Donations

| | | |
|--------------------------------------|----------------|----------|
| Membership MetroCor | \$20.00 | |
| Membership ARLHS | \$15.00 | |
| Donation, Newline | \$50.00 | |
| Donation, eHam (VE and SE calendar) | \$25.00 | |
| Donation, QSL Net (backup web host) | \$25.00 | |
| Doantion, Hudson Div Awards | <u>\$40.00</u> | |
| | \$175.00 | \$175.00 |

Club Functions

| | | |
|--------------------------------------|------------|-------------------|
| COMPASS /print/postage | \$200.00 | |
| Field Day 2004 | \$400.00 | |
| Annual Picnic 2004 | \$150.00 | |
| Fire Island 2004 | \$50.00 | |
| Annual Holiday Party 2004 | \$150.00 | |
| W2GSB DX Cluster | \$50.00 | |
| Health & Welfare 2004 | \$50.00 | |
| MISC 2004 | \$100.00 | |
| Misc Printing, club brochures, info, | \$50.00 | |
| | \$1,200.00 | \$1,200.00 |
| | | \$2,505.00 |

Collections

| | | |
|--------------|--|-------------------|
| Dues/raffles | | \$2,500.00 |
|--------------|--|-------------------|

NOTES: Projector Fund (plus can) \$227.00

WA2QAV Equipment fund \$65.00

Apparel Sales, Book Sales are small profit.

VE = equal

GSBARC 2004 VE Schedule

Jan 18- 3:00 PM

Feb 22 Babylon Town Hall EOC – 12 Noon

March 28 Babylon Town Hall EOC – 12 Noon

Apr 25 Babylon Town Hall EOC – 12 Noon

May 27 Babylon Town Hall EOC – 12 Noon

June NO VE - Field Day -6/26-6/27Babylon Town Hall

July 25 Babylon Town Hall EOC – 12 Noon

Aug 22 Babylon Town Hall EOC – 12 Noon

Sept 26 Babylon Town Hall EOC – 12 Noon

Oct 24 Babylon Town Hall EOC – 12 Noon

Nov 28 Babylon Town Hall EOC – 12 Noon

December NO VE - *Season's Greetings*

Committee Chairpersons

Club Apparel – Robert, N0UH

Club Station/Equip – Walter, KA2RGI

DX/Contesting – Tom, KA2D

Education – Walter, KA2RGI

Hamfest – Walter, KA2RGI

Library – Dom, WA2UJI

Membership – Tom, KA2D

Newsletter – Gene, KB2TXZ

Home Page – Tom, KA2D

DX Cluster – Tom, KA2D

Repeaters – Walter, KA2RGI

VE Sessions – Tom, KA2D

CLUB NET SCRIPTS

If anyone is interested in a copy of the basic 2 meter Monday night net script for GSBARC give Dave, N2UHR a call on w2gsb/r, home: 631-842-6340, or via email at: n2uhr@arrl.net, or contact Walter, KA2RGI, 631-957-0218, or via email at: ka2rgi@arrl.net.

'73 de Dave, N2UHR!

Great South Bay ARC

P.O. Box 1356

West Babylon, NY 11704-0356