GLOUCESTER COUNTY AMATEUR RADIO CLUB, W2MMD

G.C.A.R.C. OFFICERS

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REC. SECRETARY	

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2	YR.	MIKE LIPNITZN2FKS	1 YR.	JIM McDONALDNZAIV
1	YR.	CHAS. SKETCHLEYKZPQD		

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BANQUETN2AKI	_ & N2FJM	PUBLICITYN2HQL
CONSTITUTIONWAZNE	⁻ D	LEGISLATION????
CONTESTSWB2C	ak -	REPEATERSWA2TML
DATA PROCESSINGKB2C)B	SCHOLARSHIPSN26SF
FIELD DAYKA2D0	TC	SITEKB2EAL
HAMFESTWB2C4	ak.	SPECIAL SERVICESKAZZZA
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HISTORIANK2PQI	כ	TECHNICALWA2TML
HOSPITALITYKB2AI	3	TRAINING/ TESTINGWA2VQG
CHAPLINWAZBI	10	SPECIAL EVENTSWB20Y0
CROSSTALK EDITORKNZU	& N2DWR	ADVERTISINGKA2YKN
CROSSIALY PRINTING WORSE	J	

CLUB NETS

ARES/RACESSUNDAY	2000 HOURS	REPEATERS 147.78/18	224.66/223/06
10 METERSTUESDAY	2100 HOURS	FREQUENCY 28.350 MHZ	

CLUB REPEATERS

147.78/18 MHZ. 224.66/223.06 MHZ. 442.100/447.1	Ø MHZ.	PL	2Ø OR 3B
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CLUB MEETING: FIRST WEDNESDAY OF EACH MONTH AT VFW HALL IN WOODBURY, N.J. STARTS 2000 HOURS SHARP

CROSSTALK CONTRIBUTIONS: SEND TO N2DWR OR VIA PACKET THRU KB2COB 145.070 DEADLINE IS ONE WEEK BEFORE CLUB MEETING.

CLUB MONITORS 147.18/78

PRESIDENTS MESSAGE

Labor day is upon us and with it , the end of the summer season and the start of the school year. Moms and dads are cheering amd the kids are crying! I hope that everyone has had a good summer and a safe holiday weekend. Remember to watch out for the school children on the roads.

I want to thank the hamfest committee and everyone who worked at the hamfest. I hope to have a report at the meeting. Please remember to turn in any ticket money and unsold tickets to KB2COB, hamfest treasurer, as soon as possible.

Our next event is the Washington Twp. Special Olympics on Saturday, October 6th. If you have not volunteered and wish to do so, please call me or see me at the meeting.

Looking ahead, remember that nominations for next years slate of officers and directors will be open at the October and November meetings.

73s and see you at the meeting......Beth KB2EAL

EDITOR'S MESSAGE

Greetings! The task of editing Cross-talk has been given to yours truly. Let me congratulate Al, N2FJQ for a job well done. I sincerely hope I can continue to produce the excellent work that he did. Actually, what this is gives new meaning to the word, "work". As I sit here with contortions about my face and neck I realize that those few words weren't enough for Al or any past or future editors or members of their staff.

To those that wish to contribute articles, information etc. for the publication, I ask for a little extra help in preparing your "copy". If you use a word processor or download info from packet or other source using an I.B.M. compatible computer, and IF IT IS CONVENIENT FOR YOU, I'd like to have it on diskette. It doesn't matter which density or size it is. Formats acceptable are Wordperfect, PFS Write or plain ascii text. If I get only one article in that manner it'll be well worth the trouble to hook up with you for the disk. If I get no response, I tried. Oh yeah, the twisted pair file transfer or a message left on KB2COB-10(145.07) or N2JSA(145.09) is even better; use N2DWR for the recipient. I'll finally get a chance to use the gear in Marla's shack. "Move over, sweetie. Work comes before DX!"

GCARC NEW MEMBERS FOR 1990

Let's welcome our new members into the club. If you look closely at the following list, you will see three more OM-XYL teams. In the past, that was almost a rarity. Today, that combination is just about common place, as we now have quite a few OM-XYL's in our organization.

Again, welcome to the following members :

		Edward	Bubelis	Williamstown	N.J.
KB2FRM	T	Earl W.	McNeely	Collings Lakes	N.J.
KB2JKD	T	Almeida	McNeely	Collings Lakes	N.J.
кмзพ	E	Paul C.	Dallard Jr.	Chester	Pa.
N2BDC	G	Tadeusz	Niziol	Turnersville	N.J.
N2IPH	G	Robert H.	Derderian	Bridgeton	N.J.
N2JSA	T	Bernardus J.	Oudyk	Woodbury	N.J.
N2JSC	T	Andrew	Muenzenberger	Pitman	N.J.
N2KDU	T	Kenneth R.	Albone	Woodbury	N.J.
N2KLD	T	Mary Ellen	Wells	Wenonah	N.J.
N2KLE	T	Joe	Wells	Wenonah	N.J.
WA2JCT	Α	Salvatore J.	Amore	Vineland	N.J.
VVUEAW	T	Cory G.B.	Sickles	Glassboro	N.J.
WB2VOH	A	John A.	Zaruba Jr.	Franklinville	N.J.
KB2GTM	T	George Ove	Gogstad	Deptford	N.J.
N2KZU		Matt	Brophy	Woodbury	N.J.
KBØZB	Α	Jerry	Tiritilli	_	N.J.
KBØ ZC	A	Marjorie	Tiritilli		N.J.

73's Harry O. WB2GSF Membership chairman

BANQUET

Its never too early to start planning for our banquet. Mark January 12th 1990. Saturday in your calendars.

Where: Dutch Inn Rt. 295 & Harmony Rd. Gibbstown
Buffet Dinner \$17.86 per person
Cash bar, door prizes and awards
For reservations call Roslyn or Virginia
More info to follow.

Banquet committee Roslyn N2AKL and Virginia N2FJM

:::::: AWARDS :::::::

FOR THE NEW AND THE NOT SO NEW MEMBERS OF GCARC, WHO MAY NOT BE AWARE OF THE VARIOUS AWARDS AVAILABLE TO YOU, LET ME LIST THEM AGAIN:

GCARC AWARD - WORK ANY 15 MEMBERS, ANY BAND, ANY MODE, WITH STICKERS AVAILABLE FOR 30 OR MORE CONTACTS. QSL VERIFIED.

-HF AWARDS-

NOVICE/TECHNICIAN AWARD FOR NOVICES AND TECHNICIAN CLASS ONLY. WORK ANY 25 GCARC MEMBERS
ON 28.1 TO 28.5 MHZ. (10 METER BAND), USING ANY AUTHORIZED MODE.
OSL VERIFICATIONS REQUIRED.

CW AWARD - WORK ANY 25 GCARC MEMBERS ON CW, ON ANY BAND BELOW 54 MHZ. QSL VERIFICATION REQUIRED.

MIXED AWARD - WORK ANY 50 GCARC MEMBERS, ANY MODE, AND BAND BELOW 54 MHZ. QSL VERIFICATION REQUIRED.

RTIY AWARD -WORK ANY 50 GCARC MEMBERS ON RTTY ON ANY BAND BELOW 54 MHZ. QSL VERIFICATION REQUIRED.

EXTRA AWARD - WORK ANY 30 GCARC AMATEUR EXTRA CLASS MEMBERS ON . / BAND BELOW 54 MHZ, ANY MODE. QSL VERIFICATION REQUIRED.

12 METER DX AWARD-WORK ANY 25 COUNTRIES, ANY MODE, ON 12 METERS TO START AWARD; THEN 15 MORE FOR THE NEXT STICKER; THEN 10 MORE TO 50 FOR THE NEXT STICKER THEN INCREMENTS OF 3 FOR EACH ADDITIONAL STICKER. QSL VERIFICATION REQUIRED.

12 METER WAS AWARD - WORK ANY 25 STATES, ANY MODE ON 12 METERS TO START AWARD, THEN 10 MORE FOR THE NEXT STICKER; THEN 5 MORE FOR ANOTHER STICKER, THEN 1 EACH UNTIL 50 STATES HAVE BEEN WORKED. QSL VERIFICATION REQUIRED.

VHEZUHE AWARDS-

SSB AWARD-WORK ANY 25 GCARC MEMBERS ON SSB ON ANY BAND ABOVE 50 MHZ. QSL VERIFICATION REQUIRED.

PACKET AWARD-WORK ANY 15 GCARC MEMBERS ON ANY BAND ABOVE 50 MHZ. SUGGESTED FREQUENCY IS 147.54 MHZ. QSL VERIFICATION REQUIRED.

MIXED AWARD-WORK ANY 50 GCARC MEMBERS ON ANY BAND ABOVE 50 MHZ USING EITHER SSB, CW, PACKET OR RTTY. QSL VERIFICATION REQUIRED.

RTIY AWARD - WORK ANY 15 GCARC MEMBERS ON ANY BAND ABOVE 50 MHZ. SUGGESTED FREQUENCY IS 145.25 MHZ. QSL VERIFICATION REQUIRED.

UHF AWARD-WORK ANY 10 GCARC MEMBERS (POINT TO POINT) ON ANY BAND ABOVE 430 MHZ USING ANY MODE. QSL VERIFICATION REQUIRED.

-YL/XYL AWARD-

FOR YL'S/XYL'S ONLY- WORK ANY 15 MALE GCARC MEMBERS PLUS AND 3 YL/XYL MEMBERS ON ANY BAND BELOW 54 MHZ. ANY MODE. QSL VERIFICATION REQUIRED.

FOR ANY ADDITIONAL INFORMATION, SEE JACK, K2ZA.

DX COLUMN

Here is a little information for those in the Club who are interested in that part of the hobby known as, "DXing." The Solar Flux has certainly favored us this last couple of weeks with Flux density up as high as 293. This gives the 15, 12, and 10 meter boys a real crack at some very good DXing. With the Solar Flux this high those who are capable of doing 6 and 2 meter SSB work should keep their sets tuned to 28.855 MHz for the latest on the operation on those bands for "across the pond" contacts.

THINGS TO COME IN SEPTEMBER

ZD8 ASCENSION ISLAND.. Jim, N6TJ, will continue to be active as ZD8Z, off and on for the next 3 to 4 months. He will be on starting September 1 for 3 weeks.

UA9G USSR..UZ9FXB/UA9G and UA9FBH/UA9G are scheduled to be active from oblast 141 September 1 to September 10. This is a tough oblast number to get.

UL2V KAZAKHSTAN..UH8 TURKMENISTAN..Gene, UA9MA, will be active as UL2V/UA9MA September 1-5, then later as UH8/UA9MA. QSL via UA9MA's Callbook address.

KC6 BELAU.. V6 MICRONESIA.. JA2NQG (also AHOF), and JH2BNL

and JI2UAY will be active from Koror Island with the callsigns KC6CW, KC6DX and KC6MZ, respectively, September 13-16. Then they will operate from Yap Island September 16-19 as V63AR (JH2BNL), V63AN (JA2NQG) and possibly V63DX (JI2UAY). They'll be active on the following bands and modes: 80-10 meters, CW, SSB, FM; 1825 KHz CW; RTTY on 15 and 20 meters; 50.130 MHz CW and SSB. QSL each operator's home address. 9X RWANDA.. Wolf, 9X5SW, Has been reported on 21229 Khz at 1830 Z and 21278 KHz around 1800-1900 Z. He will be there for the month of September (perhaps longer if needed). QSL to P.O. Box 420 Kigali, Rwanda.

SOME GOOD STUFF FOR DX'ers

A free map of the Pacific Islands is available from the State of Hawaii Department of Business and Economic Development. The map shows all major island groups and is a worthwhile addition to your DX reference library. Request the Free Pacific Islands Map from: State of Hawaii, Department of Business and Economic Development, P.O. Box 2359, Honolulu HI 96804.

DXCC BACKLOG.. According to Don Search, W3AZD, on August 14 the DXCC Desk was processing DXCC applications received on March 31! Yes, that is a five month backlog. (Ouch).

701AA.. Unfortunately those of (us) who have received their cards for this operation can not submit them for credit until the DXAC committee makes a ruling as to country status of Yemen. The cards will be accepted for DXCC credit, but only after country determination is completed. (Hey Tony N2SS let's go).

HSOE Bangkok, Thailand.. HSOE is a club station and is operated by numerous operators, many who are just passing through. K9EL, who visits

NEW PACKET_BBS

Introducing: Coming your way is CBBS...a what? Introducing the bulletin board for your complete enjoyment and entertainment. I must warn you, this note may not be suited for the "serious" radio operators. So CHECK your PACLEN, your MAX and most important your RETRY to their maximum setting and get ready for some real PACKET fun. CBBS has been in BETA (test mode) for six months now and it is time to let it loose.

GATEWAY: A great feature is available to ALL is GATEWAY. You can monitor 70cm and connecta HAM on that frequency, while you are still on 2 meters. Very soon you will have HF, then only the sky is the limit, (hi-hi) You can actually sit with your HT/TNC/Keyboard in the park and connect to CBBS and go to town...pass the town. And you say you can't afford the rigs.....your HT is enough now.

Programs: Software galore!! Take the W command to heart and see what others have already planted on CBBS. There may not be enough hardware to contain it all hi-hi. Then use the D command and take al; I you can get! Free software... There is so much there now, that I don't have enough time to try them all. Games, morse code, GEO MAPS for DX, PC utility, drawing programs. You name it, it is there. If you wonder how to go about taking programs from CBBS and just don't know how to begin, then drop a note and reach a higher platto!!!

BBS: ...and YES, there is the luxury of reading messages and passing messages on CBBS. The power of communication and information at your finger tips. The real power of the free world! I had great fun sending one message to ALL that would read it and ask just to return a hello. There must have been hundreds returned...now THERE is a real BBS CQ. Many stayed in contact as permanent a friend, others just wanted to say "I saw your MSG on my home BBS".

QSO: Just want to chat? GREAT!! SYStemOPerators are HUMAN too. LETS TALK, just type T [enter] when you connect. T? T for talk. I just hope that you are NOT an expert typist. I can't type for didlie. When will they invent the auto-speller for packeteers anyway.

The focus of CBBS N2JSA on 145.09 is just to have a ton of fun!!! New ideas have become reallity. We will be able to exchange full color pictures with packet radio very soon. Stay tuned to Crosstalk for more about this subject.

A special thanks to Marla (N2DWR) and Ken (KN2U) for Crosstalk, Ed (K3RLI) for CBBS, John (WA3TSW) for messages, Harry (WA2VXT) hardware, making it all possible.

...And as always, keep the frequencies busy!! What you don't use, you lose!!

Have graat FUN!! TNX!

the station quite often during the year gets copies of ALL of the logs and can confirm contacts made by any operator. Or you can QSL as directed by the operator you have contacted.

DON'T FOR GET THE BIG ONE

As of this writing the visit to ALBANIA (ZA) is still on and HASPP, who has license in hand, will attempt to get permission to activate that station in September.

GOOD DXING.

K2JF

FOR SALE

Tempo S-1 H.T. with charger, extra battery pack, case and all instructions \$125.00 Call N2EDK



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WORLD RECORD HAM RADIO

Ham radio in the Guinness Book According to the 1990 edition of the Guinness Book of World Records, Richard C. Spenceley KV4AA of St. Thomas, US Virgin ISLANDS made 48,100 QSO's in 365 DAYS IN 1978. The highest recorded speed at which anyone has received CW is 74.2 WPM. This was achieved by Ted R. Mc-Elroy W4ASC on July 2, 1939. The fastest speed recorded for hand key transmitting is 37 WPM by Harry A. Turner of the US Army Signal Corps at Camp Crowder, Mo. Nov. 9, 1942. Do you know that for two years in a row, at the Dayton Hamvention, one of our local Hams won the CW copying contest. (Guess who). The Guinness/K2JF

LIGHTNING

The energy level of a lightning strike is between 2 and 200 coulombs. The major content is below the standard broadcast band. The peak current is from 2 to 400 Kiloampers. The discharge time of a lightning strike is less than 100 millisconds. Rise time is less than 10 microseconds. The recharge time between strikes is 40 seconds or greater. The average field strength is approximately 3 to 5 kilovolts per meter. The cloud to earth potential at breakdown, is 10°8 volts. Point discharge potential is approximately 10 kilovolts per meter. Propagation speed is 150 kilometers per second. Central chord corona peak is 10.0 MHz.

Tnx W7KG/RCA LABS/K2JF

Note: To refresh your memory a Coulomb is the unit of electrical charge and is abbreviated C. The Coulomb is a very large unit of force when you figure that the force between two charges of 1 C each that 1 m apart is equal to 9×10^{9} N.

N= Newton = One Newton is equivalent to 0.225 lb, a little less than 1/4 lb. (A refresher course in Physics K2JF)

HAM RADIO STUFF

On September 8 contest ARRL VHF QSO 1800 Z (33) hrs. WAE DX PH 1200 Z (36) hrs. WWDXC 10mDash 1700 Z (2) hrs.

On September 29 contest CQWW RTTY 0000 Z (48) hrs.

DO YOU KNOW THAT

On September 2 the first ARRL convention met in Chicago, IL. in 1921.

On September 10 GE pioneered simulcast with sound via WGY AM, station Schenectady and picture via General Electric's experimental station W2XB was T.V.'s first dramatic production. Hams as far away as Pittsburgh received and displayed the picture. 1942, W2XB became WRGB, which continues to this day.

On September 22 Michael Faraday, English physicist and chemist, formulated the laws of electromagnetic induction, and of a connection between light and electricity, viz. the electromagnetic rotation of polarized. light.

On September 29 the first Trans Pacific AM transmission conducted by ATT, and utilized the Naval transmitting station in Arlington VA to Hawaiian Islands in 1916.

IMPORTANT HOLIDAYS: SEPTEMBER 20, ROSH HASHANAH SEPTEMBER 29. YOM KIPPUR

ASTRONOMY STUFF

On September 1st in 1979 Pioneer made the FIST Saturn flyby. On September 2nd, Karl Harding discovered JUNO (the first major asteroid) 1894.

On September 9, E.E. Barnard discovers, Amalthea, moon of Jupiter, 1892.

On September 11, the ICE probe flew past Comet GIACOBINI-ZINNER. 1985.

On September 13, Luna 2, first craft to impact the Moon 1959. On September 19, William Bond discovers Hyperion, moon of Saturn 1848

ON SEPT 23 THE AUTUMNAL EQUINOX AT 0255 EST (See write-up).

WHEN DAY EQUALS NIGHT

This month's equinox marks the beginning of autumn in the Northern Hemisphere. It occurs at 0255 eastern daylight time on September 23, when the center of the Sun crosses the celestial equator, and extension of Earth's equator drawn on the sky.

The time of the equinox is determined by the Sun's position on an imaginary dome of stars surrounding Earth. The actual event, a hallmark in Earth's year, stems from our planet's location in orbit around the Sun.

The equinox occurs because the axis around which Earth spins is not perpendicular to the plane of our orbit around the Sun. If Earth orbited the Sun so that its equator coincided with its orbital plane, then the Sun would always appear directly above the equator. There would be no seasons, only local climate, which would depend largely on how far each region on Earth was away from the equator.

But "Earth's axis is tilted with respect to the plane of our orbit around the Sun by about twenty-three-and-a-half degrees, (23,5 degs), This tilt causes our planet's two hemispheres to trade places in leaning toward the Sun.

During the northern summer the North Pole leans toward the Sun. The Northern Hemisphere receives the Sun's light and warmth most directly. Meanwhile the South Pole points away from the Sun, and the Southern Hemisphere receives less direct sunlight and has winter. Thus, while the September equinox marks the official beginning of autumn for the Northern Hemisphere, it marks the beginning of spring for our neighbors "down under."

"Equinox" literally means "equal night,"
But day and night on the equinox are not precisely equal.
From latitudes like those in the United States the days and nights are most equal in length a few days before the March equinox and a few days after the September equinox.

THE PLANETS THIS MONTH

MERCURY is visible in morning twilight late month VENUS rises at 6.a.m.

MARS rises at 10 p.m., crosses meridian at 6 a.m.

JUPITER rises at 3 a.m.

SATURN sets at 1. a.m., crosses meridian at 9 p.m.

Best time to see these Plants is Sept 18th when we have a New Moon at 8: 46 p.m.

TNX K2JF

THIRTY YEARS AGO WITH G.C.A.R.C. BY CHARLIE SKETCHLEY, K2PQD

SEPTEMBER 27, 1960. Board of director's meeting held in home of Frank Turner, W2KE. Meeting called to order at 2025 DST. Van Turner suggested that two of the younger members be offered the opportunity to operate the title machine and address general correspondence. For this service they will receive one year's free dues. After discussion this suggestion was placed in the form of a motion by Van Turner, seconded by Paul Walton and passed by vote.

The Christmas party was discussed. It was decided that the attendance would be limited to members and their families. Organization and operation will be similar to last year's. A chairman will be appointed by the president at the next meeting.

Paul Walton, W2YNR, discussed QSL cards. Frank Whitmore should have everything ready for the printer very shortly. He would like to write an article for CQ or QST and requested our permission. This was given.

Della Parker, W2AFZ, brought up the subject of the newspaper. It was learned that we may have a mimeograph through the efforts of Horace Simpson, W2JOZ. "Cross-talk" will be reinstated as soon as possible.

A vote of thanks was proposed for all who took part in the hamfest, Della Parker proposed that the club should consider an early date, May or June, for our next hamfest.

Van Turner brought up the subject of field day. Mal Mason, W2MMD, gracefully accepted appointment as field day chairman.

Mal Mason informed the board of directors that Owens-Illinois will supply material and an electrician to complete the club shack. An early date for renewal of construction activities was suggested.

Van Turner moved that the president appoint Jack Sterner, W2GQK, to replace Al Roche on the board of directors provided both consent. Seconded by Mal Mason and passed.

The meeting was adjourned at 2215 after which refreshments were served by Mrs W2KE. The next meeting will be at Della Parker's on October 26th. (The above is a reprint of board of directors submitted by Paul Walton, recording secretary.)

September, 1990 G.C.A.R.C.

Sunday	Monday	Tuesday	W ednesday	Thursday	Friday	Saturday I
A.R.E.S./ R.A.C.E.S. NET 2000 HRS LOCAL TIME 147.78/18 REPEATER	3	G.C.A.R.C. 10 HETER NET 2100 HRS LOCAL TIME 28.350 HHZ U.S.B.	G.C.A.R.C. CLUB MEETING 2000 HRS LOCAL TIME WOODBURY V.F.W. POST	6	7 LUNCHEON 1200 HRS LOCAL TIME FIVE POINTS DINER RTE 47 & RTE 41, DEPTFORD, NJ	8 A.R.R.L. VHF QSO PARTY 1400 HRS LOCAL TIME ENDING 9-9-90 2300 LOCAL
9 A.R.E.S./ R.A.C.E.S. NET GAITHERS- BURG HAHFEST	10	G.C.A.R.C. 10 METER NET 2100 HRS LOCAL TIME 28.350 MHZ U.S.B.	12	13	14 LUNCHEON 1200 HRS LOCAL TIME FIVE POINTS DINER RTE 47 & RTE 41, DEPTFORD, NJ	15
A.R.E.S./ R.A.C.E.S. NET S.J.R.A. HAMFEST PENNSAUKEN HIGH SCHOOL	17	G.C.A.R.C. 10 METER NET 2100 HRS LOCAL TIME 28.350 MHZ U.S.B.	G.C.A.R.C. BOARD OF DIRECTORS MEETING 2000 HRS LOCAL TIME AT CLUB FACILITY	V.E.C. TESTING 1900 HRS LOCAL TIME BELLMANR COMMUN. BLDG BROWNING RD. LEWIS AVE.	21 LUNCHEON 1200 HRS LOCAL TIME FIVE POINTS DINER RTE 47 & RTE 41, DEPTFORD, NJ	MS-150 CITY-SHORE BIKE TOUR FOR INFO CALL WALT WB201Q 589-0090
ARE.S./ R.A.C.E.S NET MS-150 BIKE TOUR	24	G.C.A.R.C. 10 METER NET 2100 HRS LOCAL TIME 28.350 MHZ U.S.B.	26	27	28 LUNCHEON 1200 HRS LOCAL TIME FIVE POINTS DINER RTE 47 & RTE 41, DEPTFORD, NJ	29
30 A.R.E.S./ R.A.C.E.S.						·