#### GLOUCESTER COUNTY AMATEUR RADIO CLUB, W2MMD

#### G.C.A.R.C. OFFICERS

PRESIDENTBETH BARNISH VICE PRESIDENTMARLA BOZARTH	KB2EAL N2DWR
TREASURERROBERT LAYTON	КВ2СОВ
REC. SECRETARYCHRIS CHAMBERLIN	N2IVN
COR. SECRATARYJOHN FISHER	K2JF

#### DIRECTORS TRUSTEES

3	YR.	CHUCK COLABRESEWA2TML	4 YR.	. HOWARD MARDERWA2IBZ
3	YR.	FRANK MALINOWSKIKE2NY	3 YR	VIRGINIA MACRIEKA2ZZA
2	YR.	JERRY BARNISHWB2CAK	2 YR.	. JIM CLARKKA2OSV
2	YR.	MICHAEL LIPNITZN2FKS	1 YR	. JIM McDONALDN2AIV
1	YR.	C. SKETCHLEYK2PQD		
1	YR.	MIKE LIZZIOWA2TOP		

#### COMMITTEE CHAIRPERSON

ARES/RACESWB2LNR	MEMBERSHIPWB2GSF
AWARDSK2ZA	NETSWA2TOP
BANQUETN2DWR	PUBLICITYN2HQL
CONSTITUTIONWA2NPD	LEGISLATION?????
CONTESTSWB2CAK	REPEATERSWA2TML
DATA PROCESSINGKB2COB	SCHOLARSHIPN2GSF
FIELD DAYKA2DOT	SITEKB2EAL
HAMFESTWB2CAK	SPECIAL SERVICESKA2ZZA
HELP/WELFAREN2ILB	SUNSHINEKB2EUA
HISTORIANK2PQD	TECHNICALWA2TML
HOSPITALITYKB2AB	TRAINING/TESTINGWA2VQG
CHAPLIN	SPECIAL EVENTSWB20YQ
CROSSTALK EDITOR (ALL)N2FJQ	ADVERTISINGKA2YKN

#### CLUB NETS

ARES/RACESSUNDAY	20:00 HRS.	REPEATERS 147.78/18-224.66/223/06
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10 METERS....TUESDAY 21:00 HRS. FREQUENCY 28.350 MHZ.

#### CLUB REPEATERS

147.78/18 MHZ. 224.66/223.06 MHZ. 442.100/447.100 MHZ. PL20 OR 3B

CLUB MEETING: FIRST WEDNESDAY OF EACH MONTH AT VFW HALL IN WOODBURY, NJ.

: STARTS 20:00 HRS SHARP

CROSSTALK CONTRIBUTIONS: SEND TO N2FJQ OR VIA KB2COB PACKET 145.070 DEADLINE IS ONE WEEK BEFORE MEETING.

CLUB SITE MONITORS 147.78/18

#### PRESIDENTS MESSAGE

THE END OF TH SUMMER IS DRAWING CLOSER TO AN END AND WITH IT COMES OUR CLUB'S MOST IMPORTANT MAJOR EVENT, HAMFEST 1990. TO REMIND EVERYONE, THIS YEAR'S HAMFEST WILL BE HELD ON SUNDAY, AUGUST 26 AT THE 4H FAIR GROUNDS IN MULLICA HILL. HELP IS ALWAYS NEEDED AND APPRECIATED. THE MORE VOLUNTEERS WE HAVE THE EASIER IT IS FOR ALL. CHECK YOUR CALENDERS AND LET THE HAMFEST COMMITTEE KNOW IN WHAT AREA YOU CAN HELP OUT.

FOR THOSE MEMBERS WHO HELPED OUT AT THE 4H PARKING THIS YEAR, THANK YOU ALL. A SPECIAL THANKS TO JIM, KB2GTT, FOR HELPING ME COORDINATE THE EVENT THIS YEAR.

A SPECIAL THANKS ALSO TO W2GSN FOR COORDINATING THE COMMUNICATIONS AT THE CAMP SUN-N-FUN.

WE ALSO HAVE BEEN ASKED AGAIN THIS YEAR TO HELP OUT AT THE WASHINGTON TWP. SPECIAL OLYMPICS ON SATURDAY, OCTOBER 6, FROM 8:00am to 2:00pm. ANYONE WHO DID THIS LAST YEAR WILL REMEMBER WHAT A REWARDING EXPERIENCE IT CAN BE. ANYONE WHO CAN HELP OUT CAN SIGN UP AT THE UPCOMING MEETINGS.

LOOKING AHEAD OUR 1991 AWARDS AND INSTALLATION BANQUET WILL BE HELD ON 1/12/91 AT THE DUTCH INN. N2FJM AND N2AKL ARE IN CHARGE AND WILL BE PROVIDING THE CLUB WITH FURTHER INFORMATION.

IN CLOSING, REMEMBER THAT IT IS THROUGH THE DEDICATION OF THE MEMBERSHIP THAT OUR CLUB CAN CONTINUE TO BE VITAL AND ACTIVE. WITHOUT YOUR SUPPORT WE CANNOT CONTINUE OUR PACE IN THE YEARS TO COME. I AM OPEN TO SUGGESTIONS ON WAYS TO GIVE THE CLUB A "RECHARGE". IF YOU HAVE ANY, LET ME KNOW. THANK YOU FOR YOUR CONTINUED SUPPORT.

SEE YOU AT THE MEETING. 73, KB2EAL

PROGRAM==== \*\*\*

BEEF AND BEER NIGHT = COME OUT AND SEE THE NEW FACES.

WANTED ===

HF RIG WITH WARC BANDC, CALL BILL NJ2D

(302) 478-2757

AMATEUR AND ADVANCED

BILL RYAN WB3DPJ

3208 CONCORD PIKE WILMINGTON, DE 19803

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# ASTRONOMY NOTES THE MOONS OF MARS DISCOVERY

THE TWO TINY MOONS OF MARS WERE DISCOVERED 113-YEARS AGO THIS MONTH IN 1877. BY ASAPH HALL AT THE U.S. NAVAL OBSERVATORY IN WASHINGTON, D.C.

MAHY ASTROHOMERS SUSPECTED THAT MARS HAD MOONS BECAUSE BOTH EARTH AND JUTITER. ITS TWO HELDHORS IN SPACE, HAD MOONS, HALL DECIDED TO SPARCH FOR THE POSSIBLE SATELLIES BY LOOKING SOME DISTANCE AWAY FROM THE PLANET AND THEM MOVING SYSTEMATICALLY INWARD. HIS STRATEGY WAS TO BEGIN SEARCHING FARTHER FROM MARS IN PROPORTION TO THAT PLANT, S SIZE THAN THE DISTANCE OF FARTH'S MOON FROM OUR PLANET, WHEN NO SIGN OF A MARTIAN MOON APPEARED, HE SUCAME, DISCOURAGE, BUT HIS WIFE, ANGELINE STICKNEY HALL, URGED HIM TO HERD ON SEARCHING.

ON THE NUCHT OF AUGUST 11, 1877, HALL BEGAN EXAMINING A REGION MUCH CLOSER TO MARS. HIS TECHNIQUE WAS TO KEEP THE PLANET ITSELF JUST OUTSIDE THE FIELD OF VIEW OF HIS TELESCOPE: HE THEN SWEPT AROUND THE PLANET. PURRING THIS REGION OF SPACE ILLUMINATED BY ITS GLARE. HE FIRST GLAMISED THE OUTER MOON IN THE PRE DAWN HOURS THAT MIGHT, SHORTLY REPORE FOR ORSCHUED THE VIEW.

CLOUDY WEATHER CONTINUED FOR SEVERAL NIGHTS, BUT ON THE NIGHT OF AUGUST TO HE FOUND THE OUTER MOON AGAIN AND CONFIRMED THAT IT WAS MOVING WITH THE PLANET. THE MEXT NIGHT, WHILE WATCHING FOR THE OUTER SATELLITE, HE PISCOVERED A SECOND MOON OF MARS INSIDE THE ORBIT OF THE FIRST. THE TWO MOONS WELE NAMED DELMOS AND PHOROS, RESPECTIVELY, FOR PANIC AND LEAR, THE TWO HORSE OF THE MYTHOLOGICAL WAR GOD, MARS.

THE INNER MOON CONFOUNDED MALE BECAUSE IT WAS SO CLOSE TO THE PLAMET AND PEVOLVING FURN FASTER THAN MARS. IN FACT, AN OBSERVER ON MARS WOULD SEE THOROS RICE IN THE WEST AND SET IN THE EAST TWICE A DAY.

IN OUR DAY, SPACECRAFT HAVE MAPPED THE SURFACE OF MARS AND ITS MODIS.
THE LARGEST CRACER ON PHOROS WAS NAME STICKNEY IN HONOR OF HALL'S WIFE.

#### THE PLANETS THIS MODITE

MERCURY IS VISIBLE IN EVENING TWILIGHT, VENUS RISES AT 4 A.M. . SATURN SETS AT 4 A.M. . CROSSES MERIDIAN AT 11 P.M. (ALL TIMES ARE LOCAL).

#### 13 HAPPENED IN AUGUST

MUSICAL LI ASAPH HALL DISCOVERED DEIMOS MOON OF MARS 1877.

AUSULI IN TERSEID DETEORS (YOU THE BOYS TRY YOUR HAND AT METER OSOIS)

AUSTICE ASAPH HALL DIRCOVERS PHOROS MOON OF MARS 1877.

AUGUST S VOYAGER 2 FILES PAST SATURN, 1981.

AUGUST 12 WELLIAM BURSCHEL DISCOVERS ENCELADUS, MOON OF SATURN 1780.

#### CONTESTS

AUGUST I ARRI THE CONTEST 1800 7 FOR 24 HRS.

AUGUST II WAE DX CW 1200 Z 36 HRS.

AUGUST 05 ALL ASIA CW 0000 Z 48 HRS.

#### RADIO TRIVIA

AUGUST 2 THE RADIO ACT OF 1912 WAS INTENDED TO RESTRICT THE AMATEURS BY CONFINING ACTIVITY TO "."00 METERS AND DOWN". THE EFFECT WAS OPPOSITE, FOR IT GAVE AMATEUR RADIO LUGAL STATUS AND FOSTERED ACTIVITY IN EXACTLY THE DIRECTION WHICH PROVED MOST ADVANTAGEOUS FOR LONG DISTANCE COMMUNICATION.

AUGUST 26 LEE DEFOREST BORN 1873.. LEE DE FOREST WORKED IN MANY AREAS OF ELECTRONIC TECHNOLOGY AND TELEPHONY. HE IS THE FATHER OF THE GRID ELECTRONIC TUBE + HIS TAUDION". IT TOOK ARMSTRONG'S REGENERATIVE FEEDBACK CIRCUIT TO IRULY USE THE "AUDION" TO ADVANTAGE.

MERISE 30 THE BROADCACE OF THE RESULTS OF AN ELECTION PRIMARY BY THE DELKOID NEWS, SHE ADVERTISED BY THE PAPER IN ADVANCE AND RECEIVED BY MADVETTE INTEREST IN "AMATEUR" RECEIVING SETS BY THE PUBLIC BEGAN TO GROW.

TNX = K2JF

#### MAILBOX CALL-SIGN SLOT LIST as of 7-27-90

01. HOME 02. 03. 04. 05. 06. N2JSA 07. KA2ZRN 08. N2KLD 09. KB2AYU 10. N2KDU 11. KB2IQP 12. N2HZM 13. N2KLE	15. N2FJM 16. N2HYS 17. KA2DOT 18. A12B 19. KB2GTT 20. KE2SC 21. WA2TML 22. N2FNF 23. KC2PC 24. K2JF 25. W2PAX 26. N2ASV 27. WB2OZE	29. K2OWE 30. KB2GW 31. WB2LNR 32. NM2T 33. N2FJQ 34. WB2HVJ 35. W2SPN 36. WA2GFK 37. WA2FGA 38. WB2OYQ 39. KA2KMW 40. KZ2N 41. WA2IBZ	43. KE2NY 44. K2RCH 45. WB2THM 46. WA2PFC 47. WB2UVB 48. N2IQQ 49. KD2CR 50. WA2USI 51. WA2UDO 52. KE2ES 53. NJ2B 54. WA2TOP 55. K2PQD	57. W2DWE 58. N2DJZ 59. N2AYK 60. WB2GSF 61. WA2FZB 62. N2FKT 63. KA2OSW 64. N2FKS 65. WB2CAK 66. WB2DXB 67. WA2ZND 68. KB2GTV 69. N2IMK	71. N2DWR 72. KB2ETV 73. WA2SIT 74. N2DUZ 75. N2JLQ 76. N2IVN 77. KB2COB 78. SYSTEM USE 79. SYSTEM USE 80. SYSTEM USE
				· ·	

NOTE - The word "HOME" is stored in location 01

#### GENERAL INFORMATION OF INTEREST=

If you have read QRZ DX and found the article on ZS1 PENGUIN ISLANDS, you will read where Seal Island is " 3/4 miles long and 3 cables across at its widest part". For your information the distance can be computed from the following information: NAUTICAL MEASURE

i

10 cable's lengths = 1 nautical mile. The international nautical mile is 6076.1033 ft. Adopted offically in U.S. on July 1, 1954

# Joseph Fazzio, Inc.

HD 1, BOX 554, GLASSBORO, N.J. 08028

#### **BUILDING MATERIALS**

STEEL BEAMS, ANGLE, CHANNEL, PIPE -LUMBER, MILLWORK, HARDWARE

ALVINION & CALVINIZED MESS PIPE) (609) 881-3185 -----Corner of Pitman Downer Road FAX (609) 881-0214

and Glassboro Cross Keys Road

Open 7 AM to 1 AM

(609) 228 5166



Ample Parking

**Fine Selection of Gourmet Food** 

Steaks . Chops . Sealood Cheesecake

Rte 47 & 41 Deptford Township Conveniently Located at 5 Corners Intersection PO Box 392 Sewell, NJ 08080

# MS 150 BIKE TOUR

YES I CAN HELP		
NAME		CALL
STREET		CLASS
CITY		
PHONE ( )		
TEE SHIRT SIZE S	M L XŁ XXL	XXXL
BANDS MOBILE 146	220 440 OUT	TPUT POWER
BANDS H.T. 146	220 440 OUT	PUT POWER
I CAN HELP SAT	SUN BOTH	
AREA THAT YOU WOUL	D LIKE TO STAY	WITH IN
WILL YOU NEED A RO	OM ON SAT. NIT	E IN OCEAN CITY
YES NO		
WOULD YOU LIKE TO	HELP OUT IN A	SUPORT UNIT. IE
MED., PICK UP BUS,	SWEEP, SAG WAGO	ON OR REPAIR TRUCK

IF YOU CAN HELP OUT PLEASE FILL OUT AND RETURN A.S.A.P TO

Join us for the 10th annual MS 150 City to Shore Bike Tour,

Saturday and Sunday, September 22 and 23 and take the challenge to help those with multiple sclerosis by participating in the largest awarnight bicycle tour on the East Coast!

The MS 150 is a two-day, 150-mile round trip summertime adventure from Garden State Park in

Cherry Hill, NJ to Ocean City, NJ and back. It's also beautiful scenery like the shore country-side and Jersey pinelands, good cycling friends and wonderful food. Last year, over 2,500 cyclists from 8 to 70 years-of-age met the MS 150 challenge.

This year, we'd like you to come along, too!

MS-150 BIKE TOUR
HAM RADIO OPPS
P.O. BOX 426
NEWCASTLE, DELAWARE
19720



NO

YES



GOV. JAMPS A. FLORIO

"I am deeply delighted to lend my support to this worthwhile endeavor. I urge everyone to take part in the 10th year 'bicycling celebration."

WCAU-TVI0 anchorman Larry Kane has served as the chapter's honorary chairman of the MS 150 Bike Tour for ten years.

many new riders to the exciting 10th

According to Kane, "I'm looking forward to greeting many veterans and welcoming



#### graditedush

anniversary tour!"

Winner of the 1989 Tour de France and Sports Illustrated's 1989 Sportsman of the Year, LeMond is the national honorary chairperson of the MS 150. "Become a rider, volunteer or sponsor of the MS 150 Bike Tour. When you join the MS 150, you're joining me on a winning team."



#### SOUTH JERSEY RADIO ASSOCIATION

# **學**2nd

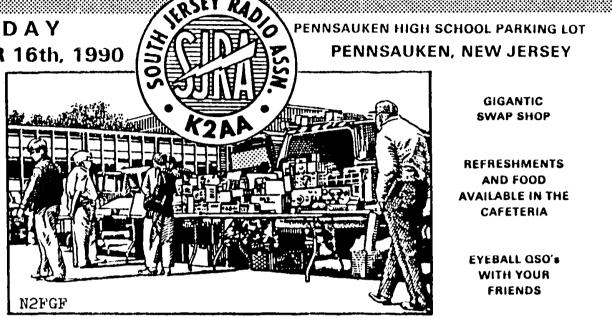
1990 - THE 74th ANNIVERSARY OF THE SOUTH JERSEY RADIO ASSOCIATION

SUNDAY SEPTEMBER 16th, 1990

**VEC-HAM** LICENSE TESTING ALL CLASSES **REGISTRATION AT** 9:30 A. M.

PLENTY OF FREE PARKING

**TABLE AND TAILGATE SALES** 



**GIGANTIC** SWAP SHOP

REFRESHMENTS **AND FOOD AVAILABLE IN THE** CAFETERIA

EYEBALL QSO's WITH YOUR FRIENDS

### **RAIN OR SHINE - 8:00 A.M. TO 3:00 P.M.**

**K2AA TALK-IN** S J R A REPEATER 145.290 (--600)

# DOOR PRIZES

Prizes will be awarded throughout the day. The three (3) main Door Prizes will be drawn at 1:00 P.M. The winners of the top three (3) prizes need not be present to win. Winners will be notified only if ticket contains winner's Call, Name & Address and Phone Number

## TICKETS

Advance Sale

\$ 3.50

At the Gate

\$ 4.00

Tail Gate (Per Space)

\$ 5.00

Tailgaters must purchase an Admission Ticket

Send Check or Money Order along with a S. A. S. E. to:

JIM McGRATH, KB2IYS

