

## Mountain Spark Gaps

New Providence Amateur Radio Club  
P.O. Box 813  
New Providence, NJ 07974

June, 1986

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### Nets:

FM Phone 145.750 MHz	Sundays at 9:00 p.m. EDT	Bill King, W2LTJ
RTTY 145.750 MHz	Sundays at 8:00 p.m. EDT	John Sheetz, K2AGI
CW 28.150 MHz	Wednesdays 9:00 p.m. EDT	Floyd Harvey, KA2DDG

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### NPARC MEETING SCHEDULE FOR JUNE

**June 9:** Annual Field Day planning meeting. If you plan to operate on Field Day, this meeting is very important. Such things as operator scheduling for the various stations, food, and the actual site will be discussed.

**June 23:** Regular NPARC Fourth-Monday meeting

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NPARC meetings are held in the meeting room of the New Providence Memorial Library at 8:00 PM the second and fourth Mondays of each month unless otherwise noted.  
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### JUNE CALENDAR

9: NPARC Field Day Planning Meeting  
21: First day of Summer  
23: NPARC Fourth-Monday Meeting  
24: First Color TV Broadcast in 1951  
26: NPARC Three Mile Island trip  
27: Telegraph service began in 1847  
28-29: Field Day

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### RTTY PICTURE OF THE MONTH



### UPGRADES

Congratulations to three new novices in the world of amateur radio:

Jim Lockhart, Abraham Satz, Paul Wicliffe Jr.

Also:

Tom Brown, KA2UGQ from Technician to General.

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### ARRL VEC PROGRAM

Know of anyone who is thinking of upgrading? Does someone you know want to go for their novice license? Don't forget that the NNJ VE Board is alive and well and has sessions the second Saturday of each month. Exams are conducted at Union County College in Cranford, NJ. FCC form 610 applications with copy of existing amateur license and \$4.25 check payable to "ARRL VEC" should be received at least 30 days prior to exam date. Walk-ins are permitted but at risk of limited test materials. Novice form 610 applications are exempt of the \$4.25 fee. Contact Carl Felt, N2XJ at 635-7686 for more information and/or 610 forms.

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### TRANSMITTER HUNT REMINDER

Due to the many events in June and July, the annual NPARC Transmitter Hunt has been re-scheduled for sometime in the fall, probably in the month of October.

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The  
New Providence  
Amateur Radio Club

## HAMFEST WATCH

**June 8 (Sunday):** The 12th annual Warminster ARC Hamfest at the Middletown Grange Fair Grounds, Penns Park Rd., Wrightstown, PA. (About 20 miles west of Trenton) Tickets \$3. Talk-in on 147.69 (-600) or 146.52 (simplex). More info: Chuck Dunn, KA3FQQ @ (215) 674-8567.

**June 21 (Saturday):** The Raritan Valley Radio Club announces its 15th annual Hamfest and Flea Market taking place at Columbia Park in Dunellen. 8 AM to 2 PM. Sellers \$5/1 space, \$10/multiple spaces. Lookers \$3, advance tickets \$2 from any member. Door prizes including Commodore 128 computer. Talk-in on 146.025 (+600) or 146.52 (simplex). More info: Dave, KA2TSM @ 763-4849 or Bill, N2AZX @ 534-2561.

**July 12 (Saturday):** Mount Beacon Hamfest and Computerfest at the Arlington Senior High School, Poughkeepsie/Lagrange, Dutchess County, NY. Admission \$3. Talk-in on 146.37 (+600) and 146.52 (simplex). More info: Julius Jones, W2IHY @ (914) 889-4933.

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## NPARC CLASSIFIEDS

For sale by Bob Brown, W2EME:

5/8th inch (non-standard) glue sticks for glue guns. 'Very reasonable'

Wanted by Dan Keese, KD2FP (377-5057):

Two-meter mobile equipment for jeep.

Wanted to borrow for copying purposes by Bill King, W2LTJ (377-5653):

Manual for TI 58C programmable calculator.

Items for sale from the estate of W2BK:

Archer headphones 16-ohms (\$5)  
B&W rotary inductor model 3852 [new] (\$20)  
Ballantine 300H vtvm (\$15)  
Bird model 43 wattmeter (\$85)  
Elements available (\$25 each):  
250W...2-30 MHz, 500W....2-30 MHz,  
1000W...2-30 MHz, 2500W....2-30 MHz,  
25W.50-125 MHz, 25W.100-250 MHz,  
100W..25-60 MHz  
Brown paddle (\$20)

Collins KWM2/516F2 power supply (\$285)  
Collins KWS-1 linear (basket case) serial number 732 (make offer)

Collins 7593 with 200 HZ filter,  
3291/516F2/312B (\$325)

Collins microphone model SM-1 (\$10)  
CDR HAM/M antenna rotor with cable (\$50)  
Drake TR4 with MS4 speaker and AC3 power supply (\$200)

Hammarlund Kilowatt-Amplifier HXL-1 (\$50)

Heathkit dummy load model HN-1 (\$5)

Heathkit monitor scope SB610 (\$65)

Henry 2K3 serial number 145Dxx (make offer)

Henry 3KA serial number 111 (make offer)

Hewlett Packard 410B vtvm (\$20)

Johnson 250 watt match box (no VSWR meter) (\$40)

Measurements model 59 grid dip meter (\$25)

MFJ tuner model 941C (\$30)

Mirage model MP-1 wattmeter (\$35)

Muffin fan model FIC-2 (\$5)

RCA Voltohmyst Senior (\$20)

Simpson model 260 multimeter (\$10)

Starrett micrometer model 213C (\$5)

Sure microphone model 444D (\$25)

Tektronix 310 scope (\$60)

Yaesu FT102 with MD-1 microphone, FV102dm digital vfo (\$700)

Full size 3 element 10/15/20 beam - stainless steel hardware, make unknown, excellent condition (make offer)

200 feet Belden RG-213U coax (50-ohm coax, better than RG-8U)

25 new PL259 coax connectors (\$15)

314 feet copper weld - size 14ga (make offer)

48-foot Spalding tower (make offer)

Please contact Gordon S. Gregory, W2IN at 627-4426 for more information on any of these items from the estate of W2BK. Please do not call after 8:00 PM.

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IF YOU HAVE articles, want/for-sale ads, information, or any other tidbits that you would like to have included in the Mountain Spark Gaps, please contact Tom Brown KA2UGB at (201) 464-7958 or on the club frequency.

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## SEEN ON USENET: net.ham-radio

From Phil Karn KA9Q:

Subject: Microwave as 13cm transmitter

I wish I had some artistic talent, because I've long had this idea for a ham mag cartoon. It depicts your typical microwave oven mounted on the top of a ham tower, pointing up at the sky at a 45 degree angle with its

door open. An alternative would depict the oven on the kitchen counter with a waveguide running out the front and out the window. There is a door in the side of the waveguide that allows you to cook something while you're on the air (this should keep the XYL happier). :-)

Seriously, it is true that microwave ovens operate on the 13cm ham band (actually, 2450 MHz is the top band edge). This is one of the bands we share with "ISM" (Industrial, Scientific, and Medical) devices. ISM is for devices that generate large amounts of RF for purposes other than communication or radar (e.g. heating) and includes diathermy machines as well as ovens. Another band we share with ISM is the new 902-908 MHz band; fortunately, ovens on 915 MHz are rare.

The power generating element in an oven is a magnetron. About the only good things going for these devices is A. They produce copious amounts of power, and B. They are cheap (i.e. they're ideal in microwave ovens). Unfortunately, magnetrons are EXTREMELY dirty sources of RF. They self oscillate with built-in cavities, so they are very unstable, and most are powered by raw AC (to cut costs and keep the duty cycle within acceptable limits). As an RF communications device, you might have better luck with spark gaps... Sell your oven and put the money into ham gear.

--From KA9Q

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#### NPARC TRIP TO TMI NUCLEAR POWER PLANT

The New Providence Amateur Radio has planned a trip to the Three Mile Island nuclear power plant in Pennsylvania for the 26th of June for NPARC members and their families. This will include a three-hour tour through the TMI facilities. Water fountains with both red and blue buttons are available.

We will leave for TMI at about 8:00 AM and arrive in the Harrisburg area at about 11:00 AM. This will give us time for lunch before the 1:30 tour begins (We must arrive on time). On the way home, we plan to visit the Shartlesville Hotel for a Pennsylvania Dutch dinner.

Please note that there are some restrictions: Minimum age is 16, a drivers license or other ID is required, participants must be able to walk at least one mile (no provisions for the

handicapped), and the group size must not exceed 32 people. Shorts, sandals, and open toe shoes are not permitted, and ladies should wear low-heeled shoes and slacks. Aliens or non-citizens must have a valid passport or visa. Everyone must make their own car-pool arrangements. We will try to help you work this out at the meetings on June 9 and 23.

A sign-up sheet will be available at the above two meetings. If you cannot attend these meetings, please send a letter stating the names of the participants to Bob Brown, W2EME at 65 Hillside Avenue, Berkeley Heights, NJ 07922. The list will be drawn up on a first-come first-serve basis.

--From W2EME

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#### GILB'S LAWS OF UNRELIABILITY

1. Computers are unreliable, but humans are even more unreliable.
2. Any system which depends on human reliability is unreliable.
3. Undetectable errors are infinite in variety, in contrast to detectable errors, which by definition are limited.
4. Investment in reliability will increase until it exceeds the probable cost of errors, or until someone insists on getting some useful work done.

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#### SHUTTLE AUDIO TRANSMITTED

The Goddard Amateur Radio Club, WA3NAN, at the NASA Goddard Space Flight Center in Greenbelt, Maryland, retransmits live space shuttle audio. Coverage begins within the hour before liftoff, and continues through the flight and until about an hour after landing. WA3NAN will not be on the air during astronaut sleep periods. Frequencies used are 3860, 7185, and 14295 KHz SSB, and 147.45 MHz FM. WA3NAN operates under a blanket waiver of section 97.113 issued by the FCC for the duration of the all space shuttle flights. See *Happenings*, November 1983 QST for details of the waiver.

--Via KBKA