

GrantAmateurRadioClub



Newsletter Issue 9 September 1997

IN THIS ISSUE...

OFFICERS CORNER Nothing submitted

HOT OFF THE PRESS

Deforest Picnic Dates Ham Foils escape Scanner lock down Next Camp-a-rama **GARC Library grows** Talk to Mars Last Meeting electric Last camp out notes Watch your head MARS CW ban Look up for \$50 CQ Ma Bell **Become Famous**

CALENDAR

Birthdays Club Events Hamfests Puzzle Corner

September 4th at 7:00pm

BIRTHDAY CLUB

Name	Date	Call
Bill	9/6	NA8J
Ridney	9/21	N8XGP
Steve	9/29	KB8VLA
Kim	9/30	N8YWX

BUY, SELL, OR

For Sale, a Drake Model TR-4 Sideband Transceiver. Full coverage on all amateur bands 10 through 80 meters. Interested persons please contact Hal KB8SUM at (937) 378-3400

NEXT CAMP-A-RAMA

(KF4JNX) Gas up the mo tor home, dust off the tent. The dates are now in for the next get-together, Sep tem ber 5th, 6th, and 7th at the Mays ville River Park. Talk in will be or on 146.52 sim plex. Con tact KF4JNX for a head count and to let her know what your bringing.

October 17, 18, 19 at the Maysville River Park is the last scheduled camp out and should include an fall paddle wheeler ride. Mark your cal en dar now for these events.

SCANNER LOCK

(World Radio) Another bill introduced in Congress to beef up prohibitions against electronic eavesdropping has scanner en thusiasts and equipment makers worried and ment. HR 2369, the Wireless Privacy En. 73, N8YWX hancement Act of 1997, was introduced by Rep Billy Tauzin of Lou isi ana. If passed, it would--among other things--amend the Com mu ni ca tions Act of 1934 to ban the sale of scanning receivers capable of receiving trans mis sions on any fre quency allo cated to any Commercial Mobile Radio Service (CMRS). The CMRS is a relatively new umbrelladesignation of subscriber-based ra dio serv ices that act like tele phone serv ices. In addition to cellular telephone, such services include commercial paging services, commercial air-to-ground services, offshore radiotelephone, personal communication services, and specialized mobile radio serv-

HR 2369 would prohibit receiving, divulging, publishing or using any intercepted transmission, and subject violators to substantial fines. It also would make it illegal to mod ify equip ment so that it may be used to un law fully in ter cept or di vulge ra dio communications. The FCC would be charged with investigating complaints and enforce ADDITION ing the stiffer regulations.

asts, hams who use scanning transceivers to receive out-of-band, and hams who use would not affect ham fre quencies, per se.

DEFOREST PICNIC IN SEPTEMBER!!

(WB8IOW) Be sure to mark your calendar for Tues day, September 9th for the De For est on the George town or Mays ville Re peat ers, Amateur Ra dio Club Pic nic and meet ing to be held at the Adams Lake shelter house They all ways have great food and fellow ship so bring a covered dish and join in. Table service and plates will be provided by the club and they still have some soda left from their weather picnic. N8YWX is personally look ing for ward to ac quir ing a few new reci pes for the future.

> Adams Lake is on State Route 41, a mile north of West Union, Ohio. Any questions' Call (937) 544-3763 or call N8YWX on the 147.00 MHz repeater. PL code 94.8 or re peater wake up code 500 on tone pad.

could affect some Amateur Radio equip - Meal be gins at 6:30 PM, meet ing will follow.

HAM FOILS PRISON **ESCAPE**

(KL7Q) Thomas Sorrow, KE4ITN, of Cleveland, Alabama, was recently recognized by the Ala bama De part ment of Corrections for confiscating electronic parts and sche mat ics for a trans ceiver from inmate. The inmate, serving a life without pa role sen tence for capi tal mur der, was plot ting to es cape from the maxi mum se cu rity St. Clair Cor rec tional Fa cil ity at Springville Alabama. Sorrow, an Extra Class licensee and correctional officer employed at St. Clair, cred its his hobby for his be ing able to iden tify the con tra band and to as sist in foil ing the in mate's es cape plot.

GARC LIBRARY

(KB8SUM) Thanks to Ramond KB8SMR our club library is ex panding. A big thanks As cur rently drafted, the bill ap pears to af-goes out to him from our club for his June con fect equipment available to scanner enthusitribution of numerous issues of QST maga zine, via Hal KB8SUM.

out-of-bandcapability for volunteer work. It If your electronic spublications are running you out, contact an officer, and do nate to us.

HAMFESTS UP AND COMING

September 6-7

Kentucky State Convention, Louisville, KY

Herb Rowe, W4WQD 5612 Highway 160, Charlestown, IN 47111 812-294-4905

E-mail:glha@thepoint.net http://www.thepoint.net/~glha/

September 20

Southern Ken tucky Ham fest, Cave City, KY Larry Bru mett, KN4IV 108 With ers Dr., Glas gow, KY 42141 502-651-2363 brumett@glasgow-ky.com

http://www.geocities.com/Capitol-Hill/5421

September 21

Greater Cincinnati ARA, Cincinnati OH

Paul N. Rie del, WB8NFT 6850 Ed mar Ct., Cin cin nati, OH 45239 513-681-6263 or 513-733-3900 Fax: 513-733-0770 E-mail: paulr@fuse.net

September 28

Hamfest Assn. of Cleveland, Cleveland, OH Wil liam Beck man, N8LXY 1-800-CLE-FEST 216-999-7388 http://www.hac.org

September 28

Independent Radio Association, Spring-field, OH Ber nie Corbin, N8XKF 6483 Brush Hollow Dr., New Carlisle, OH 45344-9148 937-882-6559

Talk to Mars.... at 2400 baud?

(Webline) For the past month, the na tion has been en thralled with pano ramic pic tures of the dusty red Martian surface and alien rocks called Yogi and Barnacle Bill. But you might be sur prised at how ba sic the communications devices are that re lay those pic tures 120 mil lion miles back to Earth.

It turns out that heart of the telecommunications system relaying messages from the So journer rover to the Path finder lan der is a pair of modi fied Mo torola 9600 baud wire less mo dems trans mit ting at 2400 baud. These are nearly the same type of mo dem you could buy for less than \$600 each back here on Earth. (NASA ac tu ally paid about \$1000 each af ter some mi nor changes.)

The trans mis sion speed of 2400 baud is due to error-checking and other protocol overhead. This low speed is stunning considering how often we complain about long waits as so ci ated with mo dems a dozen times faster.

The lander, which has a custom-built Motorola X-band transponder, actually beams the in for mation to Earth about four times faster than it com mu ni cates with its Mars-roving part ner. It has a maxi mum speed of 11,060 bits/sec (which is still less than half the speed of a com mon 28.8 Kbps mo dem.)

So, why the snail-like speeds?, Sim ple. Lots of in ter fer ence. Un like Earth bound com mu ni ca tions, NASA has to beam im ages mil lions of miles through empty space even with ra dio fre quen cies cho sen to mini mize the noise, this is still a daunt ing task (as a ref er ence, the one- way sig nal tran sit time is about ten min utes.) Power and vol ume are also at a pre mium. The Mars lan der has an an tenna about the size of a din ner plate, and it is pow ered by just 10 watts. In con trast, NASA can rely on a net work of an ten nas, each larger than a foot ball field, to cap ture the min us cule sig nals beamed from the lan der, and trans mit ting power of 20,000 watts to send sig nals back.

In all, JPL (NASA's Jet Pro pul sion Labora tory) and Mo torola spent about \$7mil lion dol lars and 21 months to de velop the com mu ni ca tions sys tem, a lot of money by cor po rate stan dards, but not much by NASA stan dards. After find ing the Mo torola UHF mo dems - which were originally designed for maritime com mu ni cations - JPL tried to make them more rug ged. It replaced the metal casing with lay ers of fiber glass and aluminum tape, replaced plastic connections with wires and removed parts that were not suitable for the vac uum of space. And be cause the mo dems were not built to oper ate under the extreme temperatures of Mars, JPL also placed them in a special in su lated box on the rover. JPL designed the antennas in ternally

Considering all the pos si ble problems, scientists on the project say that the communications system has performed remarkably well. For instance, when the craft landed on Mars, it hap pened to land right side up - making it possible to send signals immediately to Earth - some thing they called ""lain luck"

HOT TIME HAD BY ALL AT THE AUGUST MAYSVILLE CAMP-A-RAMA

(Edi tor) On August first, sec ond, and third, the place to be was the camp ground at the Mays ville boat docks. We had the usual over abun dance of great cooks and good food, and fine mu sic, but this time we also had a nice pad dle wheel ride down the Ohio on the Pad dle wheeler *Cindy*, thanks to Bob N4VGI.

An added event this time was the 1st an nual GARC blood and guts cham pi on ship vol ley ball tour na ment. I'll let the side op po site the vic tor ex plain the gory de tails but for now let's suffice to say that Jerry, KB8PVY and I, N1DJS whooped any and all comers. 'Allcomers' some times be ing as many as eight against two. Jerry and I are still await ing our tro phy. Re-match any one?

MAYSVILLE CLUB MEETING WAS ELECTRIC

(Edi tor) If you didn't make the combined GARC and Maysville club meeting in August, then you missed great food great times and a presentation on the dangers of electricity that was shocking to say the least.

Thanks to the Maysville club for their hospitality that was um um good!

NEED TO BE FAMOUS?

(Editor) Become a contributor to the GARC newsletter. You don't need to spell cor rectly, or write co her ently (take the editor for example). Just have an idea that is of in ter est to the club. Jokes, technical discussions and personal opinions all pub lished free of charge. See the news let ter cover sheet for an ad dress to send your lit er ary gems.

WATCH YOUR HEADS

(AMSAT) To mark the 40th an ni ver sary of the 1957 launch of Sput nik I sat el lite and the start of space conquest, l'Aero club of France and the Rus sian As tro nautical Federation have embarked on a joint venture to launch a miniature, work ing ver sion of the original Sput nik.

Students from the FR5KJ radio club at Jules Reydellet Col lege in St. Denis, Re union Island, and at the Polytechnic Labo ra tory of Nal chik Kabar dine in Rus sia are co op er at ing on the mini-Sputnik I. The minia ture will be able to work in space after it's hand-tossed by a cos monaut from the Russian Mir space sta tion. The Russians will build the satellite body. A transmitter made by the French stu dents will be placed in side and will emit a continuous series of beeps on 2 meters starting October 4 1997. During any given month, the signal will be able to be received in every part of the world. (The origi nal Sputnik I satellite transmitted a beacon on 20 MHz.) The idea was to interest youth in space projects and inspire them to consider careers in space-related fields.

MESSAGE TO MARS MEMBERS: CW BAN REMAINS IN EFFECT

(Webline) MARS mem bers can put those bugs, pad dles and keys away again. The head of the MARS program, Joseph Frizzell, says the ban on the use of CW on MARS frequencies remains in effect. Frizzell said a "mis cue" led to an er ro ne ous announcement within the Navy-Marine Corps MARS program to the effect that CW would again be permitted for informal use on MARS frequencies (see The ARRL Letter, Vol 16, No 32). Some Navy-Marine Corps MARS members had already resumed using the mode in the wake of that an nounce ment.

Frizzell said that while he personally has no objections to the use of CW, he must follow the policy dictates now in effect. CW was banned from MARS frequencies as of last Oc to ber 1 as a result of the policies of former As sistant Secretary of De fense Emmett Paige. "The policy has not changed," Frizzell emphasized this week. "That's a fact."

Both Frizzell and Paige are hams.

Frizzell said a change in policy is al ways possible, but he added that "there's nothing on the horizon" to indicate that CW will again be authorized for use on MARS frequencies. Frizzell said Congress has asked for a report on the MARS program by year's end. Among other things, the report will look into possible changes in the MARS mis sion.

GOING, GOING, SOLD

(K4JRB) E. F. John son Com pany to be sold: Tran scrypt In ter national Inc. has announced it's signed a let ter of in tent to ac quire E. F. Johnson Company, a former ham radio manufacturer. Johnson was a popular manufacturer of ham transmitters, antenna tuners and station accessories during the 1940s, 50s and 60s. Some Johnson ham equipment still is highly prized among collectors. E. F. Johnson is privately held and posted revenues of \$79.3 million in 1996.

The company manufactures equipment for the public safety and land mobile services. Transcrypt went public in January 1997 and had 1996 revenues of \$13.8 million. The total sale price is said to be \$34 million.

E. F. Johnson Company founded in 1923 by Edgar F. Johnson in Waseca Minnesota, was one of the first developers of two-way radio systems. The company employs 650 people at its Waseca, Minnesota, facility. For more information, see http://www.transcrypt.com/Pages/News/efj.html.

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M

8

V

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N

No one to talk to on the repeater? Dx'ing slow? Need some idle time activity' Then see how many GARC club mem ber calls can you find in the above word search ta ble? (Sorry for those me mbers whose call signs wouldn't fit. Maybe next month?)

C

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LOOK UP AND EARN \$50

(VE70HM) A balloon with a crossband repeater aboard was successfully launched August 9 by the North Okanagan Radio Amateur Club (NORAC) of Vernon, British Columbia Canada. Dubbed VBX (for Vernon Balloon eXperiment), the launch project took place during the sixth annual Sky High Hamfest on Silver Star Mountain Approximately 70 contacts were made through the airborne repeater — the farthest away in Tacoma, Washington As of August 14, the balloon still had not been located. Wilfried Mulder VE70HM, reports the balloon's path would have taken it south toward California. NORAC is offering a \$50 reward plus free admission to next year's Sky High Hamfest to the lucky finder. For more info, http://www.junction.net/norac/vbx.htm

CQ CQ CELLPHONE

(Webline) Maybe it's a bit of an inside joke on the part of cellular telephone manufacturer Nokia of Finland, but Sam Haviland of Farmington Connecticut, recently discovered that one of the ring options on Nokia's Model 638 makes the phone send CQ in Morse code. Haviland, a Navy veteran, is not a ham but he still remembers the code.