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# B.V.A.R.A. QRM

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W3SGJ

September 2001

144.710/145.310 MHZ - 100 HZ PL

447.975/442.975 MHZ - 100 HZ PL

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## B.V.A.R.A. OFFICERS

PRESIDENT.....N3OJN Stan Riffle  
1.V.PRES.....KB3EAQ Debbie Mehutcs  
2.V.PRES.....N3GZZ Joe Streit  
SECRETARY...N3SVM Bob Reid  
TREASURER...N3ALS Wes Morar

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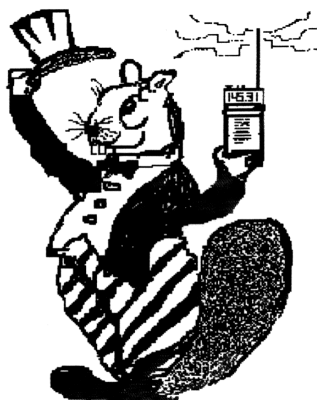
N3OJN.....Stan Riffle  
KB3EAQ.....Debbie Mehutcs  
N3GZZ.....Joe Streit  
N3ALS.....Wes Morar  
N3SVM.....Bob Reid  
WA3GFM...Al Belardia  
KA3SMF....Dave Heim  
KE3ED.....Tony Petruccelli/Station Trustee

## Newsletter Editor

N3NBJ.....Janet Petruccelli

## Newsletter Distribution

KB3EAQ....Debbie Mehutcs



## THE NET LIST

WPA CW NET.....7:00 PM DAILY.....3.585  
  
TRADERS NET.....7:00 PM MON & FRI 3.898  
  
HOSS TRADERS.....8:00 PM WEDNESDAY.3.910  
  
CALLOUS BOTTOMS...11:00 PM DAILY...3.912.5  
  
WPA PHONE & TCF.....6:00 PM DAILY...3.983  
  
ROOSTERS NET.....6:00 AM DAILY...3.990  
  
E-CARS.....8:00 AM DAILY...7.255  
  
COUNTY HUNTERS.....10:00 AM DAILY..14.336  
  
RIP VANWINKLE.....7:00 AM DAILY..145.31  
  
B.V.A.R.A. 2 METER.....8:30 PM WED....145.31  
  
B.V.A.R.A. 10 METER...9:30 PM WED...28.360  
  
WPA TRAFFIC.....9:00 PM DAILY..146.88  
  
QCWA NET.....8:30 AM SUNDAY.147.03

VISIT THE B.V.A.R.A.'s WEBSITE AT:

[www.geocities.com/the\\_bvara](http://www.geocities.com/the_bvara)

If you have a submission for the B.V.A.R.A. QRM you may submit it to Janet N3NBJ by any of the following means.. E-mail: [ke3ed@arrl.net](mailto:ke3ed@arrl.net), Packet: [ke3ed@k3oiw.wpa.pa.usa.na](mailto:ke3ed@k3oiw.wpa.pa.usa.na), or typed in text format on floppy disk. Thank you.

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## Inside This Issue

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- |   |                                  |
|---|----------------------------------|
| 1 | Club News                        |
| 2 | Amateur Allocation in Peril      |
| 3 | FCC Invites Comments – 60 Meters |
| 4 | Ham Suspended for Two Years      |
| 5 | And More...                      |
-

**SEPTEMBER CLUB MEETING**

The September club meeting will be held on Thursday the 13<sup>th</sup>, 7:30 PM at the Beaver County Emergency Center located at 250 East End Avenue, Beaver PA. Plan to attend, we'll need help finishing off the coffee and donuts, HI HI!!

**B.V.A.R.A. BAKESALE GREAT SUCCESS**

The B.V.A.R.A. owes a great debt of gratitude to Phyllis N3KUG & Debbie KB3EAQ for the success of their bake sale which earned the club \$345.00. The sale took place at Ames Department Store located in Ellwood City. Phyllis and Debbie both want to thank everyone who contributed in any way to the success of the sale.

**GREAT NIGHT FOR A CORN ROAST**

The annual club corn roast was held at Brady' Run Park shelter #10 and as usual was enjoyed by all who attended. The corn was excellent as were all the covered dishes. Thanks to all who came and brought all the delicious food. I can hardly wait until next year.

**B.V.A.R.A. PREPARES FOR PA QSO PARTY**

Preparations have already started for the clubs annual entry in the Pennsylvania QSO Party on the weekend of October 13<sup>th</sup> & 14<sup>th</sup>. Be sure to mark your calendars. Tentative plans are to have our operation, again, high atop Paine Mountain in Independence Twp. Stations and food still need to be planned. If you would like to participate please let Al WA3GFM or Tony KE3ED know. Last year we did quite well, over 500 contacts. This year we'd like to do better.

**HAMS NIGHT OUT**

Due to popular demand the "Ham's Night Out" dinners will start up again this month. On Saturday the 15<sup>th</sup> we plan to meet at the Willow's restaurant in Industry at 6:30 PM. Plan on joining us for an evening of great fellowship!

**DONATIONS APPRICIATED**

In the month of August a letter was sent out to all members outlining our need for monitory help. Unfortunately the proceeds from dues alone does not quite cover the costs for us to provide services such as a newsletter, rent and telephone service at the repeater sight as well as liability and equipment insurance that the club must carry throughout the year. Bake sales and so forth help to address these shortfalls but do not solve the problem. If you can help with any donations it would be most appreciated. If you have helped us in the past, Thank you.

**B.V.A.R.A. QRM****==>ARRL, AeroAstro SQUARE OFF OVER 2300-2305 MHZ**

In a spectrum battle pitting Amateur Radio against a commercial interest, the ARRL and AeroAstro this week filed comments with the FCC to bolster their respective--and competing--proposals for 2300 to 2305 MHz. ARRL has petitioned to elevate the Amateur Service from secondary to primary status on the band and requested that no commercial operations be introduced. AeroAstro seeks co-primary status with the Amateur Service to accommodate a Miscellaneous Wireless Communication Service satellite-based position-monitoring system.

The FCC put both petitions on public notice last month. There is no primary occupant at 2300-2305 MHz.

The ARRL characterized AeroAstro's petition as "a Trojan horse" and came out with both barrels blazing. "There is nothing contained in the four corners of the AeroAstro petition that would indicate the extent of compatibility between incumbent and future Amateur operation and the open-ended MWCS operation proposed by AeroAstro," the ARRL asserted. Given the unpredictable and mobile nature of Amateur Radio and AeroAstro's proposed use, the League said, "There is no possibility whatsoever of coordination of operations between auctioned MWCS and Amateur operations in the band."

AeroAstro claims in its comments that the 1 W spread-spectrum uplinks of its proposed Satellite Enabled Notification System (SENS) and Amateur Radio can share the 5 MHz of spectrum and still protect the nearby NASA Deep Space Network. While asserting that it "does not seek to cut back current Amateur operations in the band," AeroAstro also called on the FCC to impose severe power and antenna limitations on hams at 2300-2305 MHz.

Under the AeroAstro petition, Amateurs would be limited to 100 W output and antennas with a beamwidth no greater than 5 degrees for "narrowbeam" operation such as Earth-Moon-Earth communication. For other operation, AeroAstro wants the FCC to limit amateurs to 25 W EIRP.

"This is totally unacceptable," the ARRL retorted in its comments. "It is preclusive of most Amateur operation in the band." The current situation, where no service is primary, is preferable to such a sharing arrangement, the ARRL said.

A co-primary allocation such as AeroAstro proposes also would make no provision to mitigate interference. AeroAstro's mobile SENS consumers, the ARRL said, "would not be able to meet any standard of responsibility in addressing interference avoidance and remedies relative to Amateurs."

The ARRL said the FCC already has made "adequate accommodation" for services such as the one AeroAstro has proposed "without compromising the 2300-2305 MHz

Amateur allocation." Calling on the FCC to either dismiss or take no action on the AeroAstro petition, the League noted that a proposal now pending before the FCC would allocate 1670-1675 and 2385-2390 MHz "for exactly the type of use proposed by AeroAstro."

### **==>FCC SCRUTINIZING GEORGIA ARRL VEC EXAM SESSION**

The FCC has announced the audit of a second ARRL VEC Amateur Radio examination session. The ARRL VEC alerted the FCC to discrepancies in the May 19, 2001, exam session in Statesboro, Georgia, and forwarded relevant documents, prompting the FCC audit. Last month the FCC also announced that it was auditing a May 10 ARRL VEC exam session in Trumbull, Connecticut.

ARRL VEC Manager Bart Jahnke, W9JJ, says the 11 volunteer examiners listed on the Test Session Report remain suspended pending the outcome of the FCC audit. Suspension is standard operating procedure in such situations, he explained.

In an letter to the VEs originally sent July 23 but revised August 3, FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth said that based on the evidence he's seen, volunteer examiners at the May 19 Statesboro session used exam question sets and Morse text identical to those used at several recent exam sessions. Hollingsworth said that apparently contradicts the intent of Section 97.509(f) of the Amateur Service rules, which prohibits administration of a "compromised examination."

"Furthermore," Hollingsworth continued, "it appears that the test candidates had been shown, or had access to, the Morse code answer key for the examination administered."

There were 13 applicants at the May 19 session. Eleven of them qualified for a new license or upgrade. At the FCC's direction, all applications are being held by ARRL VEC, pending the outcome of the FCC audit.

The FCC's letter of inquiry went out to volunteer examiners Ellie Waters, W4CJB; Cheryl L. Waters, W4CLW; Joanne D. Sharpe, KF4WFN; John W. Sharpe, WA4BE; Joseph A. Horne, N4ZAJ; George B. Grant, KF4WPU; Robert T. Jernigan, W4RTJ; Kathy L. Lanier, KD4MVY; Marshall R. Thigpen Jr, W4IS; Lawrence A. Lewis, K4RRR; and Charles F. Roberts, AI4A.

Jahnke said that, while the names of Roberts and Lanier appeared as participating VEs, information provided to ARRL VEC after the session indicated that neither was at the May 19 session. For now, they remain suspended along with the others listed.

Among other things, Hollingsworth has asked the 11 VEs to explain their roles at the Statesboro session and to detail any

## **B.V.A.R.A. QRM**

relationship between the Morse and theory tests administered at recent examination sessions and the ones used on May 19. He also asked them to state the relationship between the theory tests used for class and/or practice sessions and the theory tests administered at recent examination sessions.

He also wants to know the dates and locations of all exam sessions they've participated in over the past two years.

### **==>MIDWEST YOUNGSTERS GATHER AT "ZERO-DARK-30" FOR ARISS QSO**

Seventeen Indiana elementary and middle schoolers got up extra early July 31 to speak via Amateur Radio with International Space Station crew member Jim Voss. The youngsters, who attend five Hobart-area schools, gathered before 4 AM at Joan Martin Elementary School to participate in the Amateur Radio on the International Space Station contact. All 17 got to ask a question of Voss, who was in his usual high spirits.

In answer to one youngster's question, Voss said the most unexpected thing he'd encountered in space was when the three main ISS computers had problems at the same time. "We never thought that would happen," he said. "Luckily, the people on the ground who support our flight were able to figure out what to do, and we were able to solve the problem and all of our computers are working properly."

As for the most exciting thing, Voss told the students that space walks have been "a remarkable experience" for him each of the four times he's gone out. Being launched into orbit was "quite an exciting ride," he said. Getting into space takes about eight minutes, he explained, but then it takes another two days to catch up with the ISS.

Voss said he expects a hamburger--which he has not had since he went into space nearly five months ago--and ice cream--which is not available on the ISS--to be among the first things he'll want to eat when he returns to Earth later this month.

Asked about how trash is disposed of on the ISS, Voss explained that the crew stows its trash in bags similar to the ones used on Earth for that purpose. The rubber bags are sealed up and eventually stowed aboard an empty Russian Progress cargo vehicle, he explained. "And then, that rocket goes back into the Earth's atmosphere after it's full and it's all burned up and destroyed," he said. Some trash also goes back to Earth aboard the shuttle when it visits the ISS.

Before signing off, Voss urged the youngsters to continue studying space and to "reach for the stars."

Mike Frank, KF9WW, who handled Earth-station chores at the school, called the contact "a huge success." Some of those involved also got to see the ISS pass overhead.

"Hams assisting with monitoring the tracking of the antennas from the rooftop reported a spectacular visual sighting of the ISS, which included a 'flare' of the spacecraft near the peak elevation of 83 degrees," Frank said. "Unfortunately, most of us missed that part of the excitement." The ISS is about 210 miles above Earth.

Voss and the Expedition 2 crew of Susan Helms, KC7NHZ, and Crew Commander Yuri Usachev, RW3FU, are scheduled to return to Earth in about three weeks.

ARISS is a cooperative program of ARRL, AMSAT and NASA. More information is available at the ARISS Web site, <<http://ariss.gsfc.nasa.gov>>.

#### **==>CALIFORNIA AMATEUR AGREES TO STAY OFF REPEATERS UNTIL 2004**

A California amateur is to stay off repeaters for the next two and a half years as part of an agreement with the FCC. But, if Technician licensee Lester M. Killingsworth, KE6WSC, of Hollywood, violates the agreement, he could face license revocation proceedings.

FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth wrote Killingsworth on June 15, outlining alleged violations monitored May 17 on the W6NUT repeater system in the Los Angeles area. The letter included a transcript of some of Killingsworth's transmissions, which, Hollingsworth said, contained obscene and indecent language.

Killingsworth replied to the FCC inquiry by telephone in early July, and his response is "under review," Hollingsworth said. In the meantime, Killingsworth agreed to the suspension of his repeater privileges, and Hollingsworth said the FCC will hold any enforcement action in the matter in abeyance.

If there are no violations, Hollingsworth said, the repeater prohibition will expire automatically at midnight January 21, 2004.

#### **==>FCC ACTION PUTS AMATEUR ALLOCATION IN PERIL**

The FCC has included a primary Amateur Service allocation among bands it plans to examine to support the introduction of advanced wireless services, including third-generation (3G) mobile systems. Meeting August 9, the FCC said it will seek comments on reallocating some spectrum in the 2390 to 2400 MHz amateur segment as well as in the non-amateur 1.9 and 2.1 GHz bands for unspecified mobile and fixed services.

The FCC adopted a Memorandum Opinion and Order and Further Notice of Proposed Rulemaking that explores additional bands to support advanced wireless and 3G services. The FCC said the further proceeding supplements

## **B.V.A.R.A. QRM**

the record of its January 2000 advanced wireless spectrum proposals by providing "new allocation options," adding that it would "seek comment on the benefits and costs of each."

The Commission said it "intends to explore spectrum options that would complement, rather than substitute for" alternatives identified in the January 2000 NPRM. Besides 2390 to 2400 MHz, the additional bands are 1910-1930 MHz, 1990-2025 MHz, 2150-2160 MHz, and 2165-2200 MHz. The 2390-2400 MHz band is also available for certain unlicensed uses under FCC Part 15 rules.

ARRL General Counsel Chris Imlay, W3KD, and other observers believe the FCC is eyeing 2390 to 2400 MHz as one place to move other services displaced to make way for 3G. "We could have anything in there," he said. "It's totally up in the air." Unclear until the FCC finally acts in the matter is whether amateurs might continue to have access to the band on a shared basis.

Imlay cautioned the Amateur Radio community to hold off any comments to the FCC until the Commission actually issues its Further Notice of Proposed Rulemaking and requests comments.

The issue was presented to the FCC by the Wireless Telecommunications Bureau and the Office of Engineering and Technology. "The WTB presentation included reference to 2390-2400 MHz and said the Commission was particularly interested in the impact of the proposal on the Amateur Service," Imlay said. Gloria Tristani, the only commissioner to comment on the issue, expressed concern about how the FCC's action would affect the Amateur Service.

The FCC says it plans to seek comments on the potential for commercial use of the additional bands "for new advanced wireless services or for the relocation of other incumbent licensees or operators" displaced by any final allocation decision; the advantages and disadvantages of the options, including their potential use for advanced wireless services; the potential effect of the allocation proposals on existing and prospective users of the bands and the services they provide; and the effect that allocating the additional bands or portions of them might have on global compatibility for advanced wireless services to the extent not identified by World Radiocommunication Conference 2000.

In addition to 2390 to 2400 MHz, the Amateur Service has primary allocations in this part of the spectrum at 2402 to 2417 MHz. The ARRL has asked the FCC to grant the Amateur Service primary status at 2400 to 2402 MHz, and Imlay said he's optimistic the petition will be granted. The AO-40 satellite has been successfully using that band for downlink telemetry and transponder operation and AMSAT plans a similar downlink for its next satellite project.

Earlier this year, the ARRL re-petitioned the FCC for primary status at 2300 to 2305 MHz. The League's petition faces

competition from AeroAstro, which wants co-primary status with the Amateur Service for its commercial satellite-based location service.

### **==>NEW AMATEUR SATELLITE TO LINK REMOTE APRS NODES**

A new Amateur Radio tracking and communications satellite called PCSat is scheduled to launch September 1 (0100 UTC) from Alaska. PCSat will augment the existing Amateur Radio Automatic Position Reporting System (APRS) by providing links to the 90 percent of Earth's surface not covered by the terrestrial network.

Designed and assembled by midshipmen at the Naval Academy in Annapolis, Maryland, PCSat's first mission was to provide practical hands-on experience in support of the students' aerospace curriculum. The midshipmen worked under the guidance of Academy Senior Project Engineer Bob Bruninga, WB4APR--the acknowledged "father of APRS."

"We hope that PCsat will be a new direction for amateur satellites by serving the communications needs of travelers with only mobile and hand-held radios anywhere on Earth," Bruninga said. PCSat will be the first satellite to report its exact position directly to users via its onboard GPS. This means that whenever the bird's in view, users won't need tracking software to determine its position.

According to Bruninga, the satellite will demonstrate vehicle tracking and communication for GPS-equipped remote travelers--including Naval Academy vessels at sea, cross-country travelers, expeditions or anyone far from the existing APRS terrestrial tracking infrastructure  
<<http://web.usna.navy.mil/~bruninga/digis.html>>

In addition to its APRS capabilities, the satellite will offer 1200 and 9600-baud packet operation on VHF (145.825 MHz) and UHF (435.250 MHz). For APRS digipeating, the satellite will use the recognized North American APRS frequency of 144.39 MHz.

Bruninga said that PCsat should make a great classroom tool, since its telemetry can be received by any hand-held packet radio for display to students on their PCs. "And with the Internet connectivity of ground stations worldwide," he said, "classes are not limited to observing passes only over their school, but anytime PCSat is in view of any other participating school."

PCSat was deemed spaceworthy last month. Bruninga left this week for Alaska and the launch preparations. PCSat will be one of four satellites in the Kodiak Star payload, and the only one with Amateur Radio capabilities. The others are Sapphire, Starshine III, and PicoSat.

For more information, visit the PCSat Web site,  
<<http://web.usna.navy.mil/~bruninga/pcsat.html>>

## **B.V.A.R.A. QRM**

### **==>FCC PULLS THE PLUG ON AH1A CALL SIGN**

The FCC has cancelled the AH1A call sign made famous during a 1993 DXpedition to Howland Island, and returned its holder's original US call sign. A May 23, 2001, FCC letter to Luigi "Gino" Attaianesi, I8ULL, had questioned whether AH1A had been obtained legitimately.

The FCC says Attaianesi, then KF1P, applied for a new sequential call sign in 1982 and listed "1 Seashore Drive, Canton Island, EQ" as his mailing address, but then asked that the license be sent to a mailing address in Massachusetts. The FCC granted AH1A on April 23, 1982. Not long afterward, Canton Island became part of the Republic of Kiribati.

The FCC says Attaianesi did not request a change to a US mailing address until 1988. Besides, Kiribati authorities told the FCC in April that there never have been street addresses on Canton Island. "Without a bona fide mailing address on Canton Island, it appears you were not eligible to have the call sign AH1A assigned to your station," the FCC wrote Attaianesi.

When it didn't get a reply or an explanation, the FCC canceled the AH1A grant on July 19, 2001, and returned Attaianesi's US call sign to KF1P.

The FCC's action prompted an idea from ARRL Rocky Mountain Director Walt Stinson, W0CP, who was among the 1993 AH1A team members. "No DXpedition since AH1A has been permitted to obtain a relevant prefix designator, although many have sought them," he said this week. At its July meeting, on a motion by Stinson, the ARRL Board of Directors, unanimously agreed to have the ARRL formally ask the FCC to modify its 1x1 call sign program "to accommodate the issuance of temporary 2x1 call signs from United States prefixes designating areas which contain no bona fide mailing addresses."

The FCC's letter to Attaianesi is available on the ARRL FCC Amateur Radio Enforcement Letters page,  
<[http://www.arrl.org/news/enforcement\\_logs/2001/0602.html](http://www.arrl.org/news/enforcement_logs/2001/0602.html)>.

### **==>FCC AFFIRMS DENIAL OF CB DX PETITION**

The FCC has affirmed its decision of a year ago and denied a Petition for Reconsideration of a proposal to amend FCC Part 95 rules to permit DXing on the 11-meter Citizens Band. The petition, filed by Popular Communications Contributing Editor Alan Dixon, N3HOE, sought to lift the prohibition on communication or attempts to communicate with CB stations more than 250 km (approximately 155 miles) away and to contact stations in other countries.

Dixon asked the FCC last September to reconsider its denial of his petition, designated RM-9807, on the grounds that the Commission had not addressed emergency communications

and the applicability of a limit on the distance of such communications. In declining July 30 to reverse or revise its earlier denial, the FCC maintained that it had turned away Dixon's petition in the first place because it was inconsistent with the fundamental purpose of the CB Radio Service. The FCC said it has already considered the matters raised by Dixon's Petition for Reconsideration and did not believe it had to address every type of communication for which the service might be used.

The FCC said individuals finding themselves in an emergency situation would be more likely to have other radio services available to them, such as amateur, marine, land mobile or cellular. "Further, we believe that messages from these stations are more likely to result in the individual quickly obtaining the needed emergency services," the FCC concluded.

The ARRL had commented in opposition to the initial petition but did not comment on Dixon's Petition for Reconsideration.

#### **==>FCC INVITES 60-METER PETITION COMMENTS**

The FCC is accepting comments on the ARRL's petition seeking the allocation of 5.250 to 5.400 MHz to the Amateur Service on a domestic (US-only), secondary basis. The Commission put the proposal on public notice this week and assigned a rulemaking number, RM-10209, to the proceeding. Comments are due by September 12, 2001.

Interested parties may comment on the proposal using the FCC's Electronic Comment Filing System (EFCS) <<http://www.fcc.gov/e-file/ecfs.html>>. Commenters should reference "RM-10209" in their postings. Even if the FCC eventually okays the petition, it's likely to be several years before the new band actually becomes available.

In its petition, the ARRL told the FCC that the new band would aid emergency communication activities by filling a "propagation gap" between 80 and 40 meters, particularly for emergency communications during hurricanes and severe weather emergencies. The ARRL also said a new 150-kHz allocation at 5 MHz also could relieve substantial overcrowding that periodically occurs on 80 and 40.

The ARRL has proposed that General class and higher amateurs be permitted to operate CW, phone, data, image and RTTY on the new band running maximum authorized power. No mode-specific subbands were proposed. If allocated to the Amateur Service on a secondary basis, hams would have to avoid interfering with--and accept interference from--current occupants of the spectrum, as they already do on 30 meters.

The ARRL said that its successful WA2XSY experimental operation between 1999 and this year has demonstrated that amateur stations can coexist with current users and that the band is very suitable for US-to-Caribbean paths.

## **B.V.A.R.A. QRM**

A copy of the ARRL petition is available on the ARRL Web site, <<http://www.arrl.org/announce/regulatory/5MHz>>.

#### **==>ARRL TO FCC: STOP THE ENCROACHMENT!**

The ARRL has called on the FCC to put an end to commercial encroachment on amateur allocations at 2.3 and 2.4 GHz. The League included the request in its reply comments, filed August 16, on a petition by AeroAstro to share co-primary status with the Amateur Service at 2300 to 2305 MHz. The ARRL reiterated its stance that the company's petition represents "a Trojan Horse" and that there is no way that Amateur Radio and AeroAstro's position monitoring system could share the same spectrum.

"It is time for the Commission to stop those encroachments, because they have gone too far already," the ARRL said.

The League said AeroAstro's petition for a commercial Miscellaneous Wireless Communication Service allocation at 2300 to 2305 MHz not only would impose "preclusive operating conditions" on hams but represents "yet another in the continuing series of encroachments" into amateur allocations between 2300 and 2450 MHz. The ARRL asserted that AeroAstro has failed to back up its claim that hams and low-power commercial operations can share the band on a co-primary basis without interfering with each other. An interference study prepared by the ARRL Lab and attached to the League's comments predicts "intolerable" interference, especially to weak signals, if the AeroAstro petition were granted.

ARRL has petitioned to elevate the Amateur Service from secondary to primary status on the band and requested that no commercial operations be introduced. AeroAstro seeks co-primary status with the Amateur Service to accommodate its Satellite Enabled Notification System (SENS) position-monitoring system under MWCS rules. The FCC put both petitions on public notice last month, and both parties filed comments earlier this month. There is no primary occupant at 2300-2305 MHz.

"There is no dispute that the segment near 2304 MHz is uniquely suited to amateur weak-signal communications, and the remainder of that segment is used and useful for other types of amateur communication," the ARRL said in its reply comments.

AeroAstro says its 1 W spread-spectrum SENS uplinks and Amateur Radio can share the 5 MHz of spectrum and still protect the nearby NASA Deep Space Network. While contending that it "does not seek to cut back current Amateur operations in the band," AeroAstro also asked the FCC to severely limit amateur power levels in the band. The ARRL has called those recommendations "Draconian" and "unacceptable."

The ARRL has contended that AeroAstro should wait until the FCC finalizes another proceeding, ET Docket 00-221, that would make spectrum at 1670 to 1675 and 2385 to 2390 MHz available for the MWCS system it proposes.

The League asked the FCC to dismiss the AeroAstro petition as defective and to grant the League's petition for primary amateur status at 2300 to 2305 MHz.

A copy of ARRL's reply comments in the proceedings, RM-10165 and RM-10166, are available on the ARRL Web site <<http://www.arrl.org/announce/regulatory/rm-10166/rm-0166-reply.html>>

## **==>ARRL ANNOUNCES AMATEUR RADIO INTERFERENCE ASSESSMENT PROJECT**

The ARRL has inaugurated the Amateur Radio Interference Assessment (ARIA) project. The effort will involve amateur volunteers across the country to assess the noise levels primarily from unlicensed devices in bands above 400 MHz.

ARRL President Jim Haynie, W5JBP, has advised the FCC that ARRL plans to conduct ARIA as a "real-world" noise study. The League will contribute its results to an overall radio noise study sponsored by the FCC Technological Advisory Council. The TAC study will look into whether noise generated by low-power unlicensed Part 15 devices is on the rise and whether it's adversely impacting other services.

ARRL's role will be to measure radio noise in the amateur bands above 400 MHz, with initial emphasis on the band 2400-2450 MHz, where Bluetooth and IEEE 802.11b-protocol wireless local area networks are gaining popularity. The ARIA's noise-measurement program will begin with some exploratory tests by the ARRL Laboratory.

Long-term tests starting next year will assess noise trends on the UHF/microwave bands over a period of several years to determine if the situation is staying the same, getting worse or getting better.

"If it's getting worse, as some suspect, we will then be armed with factual data to develop a strategy for continued Amateur Radio access to the UHF/microwave spectrum," said ARRL Technical Relations Manager Paul Rinaldo, W4RI.

ARIA is attempting to identify volunteers to participate in the program. Rinaldo asked that "qualified and motivated" individuals send resumes and information related to test and measurement capability and equipment availability to [aria@arrl.org](mailto:aria@arrl.org).

Initial volunteers should be willing to review the test plan, have receiving equipment and antennas capable of covering the 2400-2450 MHz band in a vehicle, and be able to report results in a timely manner.

## **B.V.A.R.A. QRM**

### **==>AO-40 "S1" TRANSMITTER GOES SILENT**

AMSAT reports the 2.4 GHz "S1" transmitter aboard AO-40 abruptly quit August 13 while AO-40 was in view of most of the Eastern Hemisphere during orbit 362. An initial attempt to manually switch the S1 transmitter back on apparently was not successful.

Ground controller Stacey Mills, W4SM, reports normal telemetry readings up to the point that the transmitter ceased operating and that no commands were being sent or experiments under way at the time. An onboard scheduler switched on the S2 transmitter at the appropriate point in the spacecraft's orbit. Mills said subsequent telemetry indicated no abnormalities or logged events to account for the failure.

The S1 transponder, connected to a higher-gain parabolic antenna, had been brought into the rotation to offer improved coverage when the satellite was farther from Earth. The S2 transponder is connected to a helical antenna that has about 10 dB less gain than the parabolic antenna.

While ground controllers continue to study the situation, the S1 transmitter has been taken out of the schedule. The U-band and L1-band to S2-band transponder passbands will remain in the operating program.

"The schedule may also be modified for longer passband periods, given the broader coverage of the S2 helical antenna," Mills added.

Prior to the event, the recently commissioned S1 downlink transmitter had produced excellent results, and many stations reported much stronger downlink signals via the S1 transmitter.

Earlier this month, AO-40 performed what might be its most spectacular stunt to date when the onboard Japanese-made SCOPE camera snapped a photo of Earth. The result was a magnificent color picture of our planet, the illuminated portion appearing as a bluish crescent. The first photograph was shot August 7 using the SCOPE camera's wider lens.

AO-40 ground controllers continue efforts to reorient the satellite, reducing the squint angle so its antennas are facing directly at Earth. A so-called "mystery effect" persists, affecting AO-40's orbit near Earth and puzzling the satellite team. Ground controllers had hoped that the effect might disappear after the satellite's orbit was raised at perigee—its closest point to Earth—by nearly 700 km.

For more information on AO-40—and a look at the SCOPE camera photo—visit the AMSAT-DL Web site, <http://www.amsat-dl.org/> or the AMSAT-NA Web site, <http://www.amsat.org>.

### **==>CALIFORNIA AMATEUR AGREES TO TWO-YEAR SUSPENSION**

An Amateur Extra class operator from California has agreed to a two-year suspension of his amateur privileges. The accord with Robert J. Kazmierski, WE6M, of San Mateo followed longstanding allegations of deliberate interference. The FCC's San Francisco office issued Kazmierski an Official Notice of Violation (NOV) in late June.

FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth said the FCC field office referred the case to him for a possible settlement before seeking a fine in the case. He confirmed the suspension agreement with Kazmierski by letter August 3.

"I called him, and he was willing to negotiate a suspension," Hollingsworth told the ARRL. Kazmierski could have faced a fine of up to \$7500. If there are no violations of the agreement, the suspension expires automatically at midnight August 3, 2003.

The FCC cited Kazmierski for causing malicious interference earlier this year. Acting in response to a complaint, FCC agents observed an unmodulated carrier on 146.550 MHz--a recognized 2-meter simplex channel--while other amateur communications were in progress. They tracked the interference to Kazmierski's residence. A subsequent inspection revealed an operational transceiver tuned to 146.550 MHz.

In a letter to the field office on July 2, Kazmierski apologized for the infraction, said it wouldn't happen again, and pledged to stay off the air at least until the end of this year. His plea notwithstanding, Hollingsworth said, Kazmierski will be off the air until 2003, provided he abides by his agreement with the FCC.

#### **==>KD5OPQ HEADS NEW ISS CREW**

The guard is changing this week aboard the International Space Station with the arrival of the Expedition 3 crew headed by Frank Culbertson, KD5OPQ. Culbertson and his Russian crewmates--Mission Pilot Vladimir Dezhurov and Flight Engineer Mikhail Tyurin--arrived August 12 aboard the shuttle Discovery.

The Expedition 3 has taken over the space station and the Expedition 2 crew has moved to the shuttle Discovery in preparation for their return trip to Earth. A formal change-of-command ceremony was scheduled for Aug 17.

Culbertson, 52, rejoined the corps of active astronauts after desk duty as a NASA executive. He is a former shuttle commander. Before deciding to return to space, Culbertson was the program manager for NASA's Shuttle-Mir program, which saw crew exchanges that put US astronauts aboard the Russian space station and Russian cosmonauts aboard US shuttle missions.

## **B.V.A.R.A. QRM**

The Expedition 2 crew of Commander Yury Usachev, RW3FU, and US astronauts Susan Helms, KC7NHZ, and Jim Voss, has been in space since March. Their departure comes about a month later than originally anticipated because of problems with the ISS robot arm. By the time the shuttle returns them to Earth August 22, they will have spent 167 days in space. Helms has admitted to having mixed feelings about leaving the ISS.

During their stay, the Expedition 2 crew managed to fit in 14 Amateur Radio on the International Space Station (ARISS) contacts with youngsters on Earth--including one with Scouts attending the Boy Scout Jamboree in Virginia. Helms also conducted the first ARRL Field Day operation from space in late June.

The Expedition 3 crew is expected to also be active in the ARISS effort. The tentative schedule calls for contacts later this month with the Kopernik Space Education Center in New York, as well as contacts with Altamonte Elementary School in Florida.

More information about the launch of STS-105 and the International Space Station is available on the Web, <<http://spaceflight.nasa.gov>>.--NASA

#### **==>MARITIME NET "DELIVERS" BABY TO SAILOR AT SEA**

Thanks to Amateur Radio, a sailor aboard a US Navy destroyer at sea got to hear his newborn son's cries for the first time. On August 12, members of the Maritime Mobile Service Net, with cooperation of the Pacific Seafarers Net, put sailor Mark McDonald in touch with his wife, Wendy, in California, who was about to go into labor. The sailor later was able to chat with his wife and her mom and to listen to his son's crying.

Terry Pipitone, KB1FMM, in Connecticut, got a front-row seat. He said the Net session started out in typical fashion on 14.300 MHz. It soon got interesting after Tom Lange, W4MDL, on McDonald's ship checked in seeking help from anyone who could put the husband and wife in contact. When no West Coast stations were available, Pipitone made some calls to California, where--as it turned out--Wendy McDonald was headed for the hospital.

As the Net's closing time neared, the proceedings shifted to the Pacific Seafarers Net on 14.313 MHz. While KB1FMM remained in contact with the hospital, ARRL member Tom Whelchel, WA6TLL, in California stepped in to provide a phone patch between the hospital and the ship--somewhere in the North Atlantic.

As Pipitone tells it, things happened pretty fast after that. "At 0810 the baby was born and at 0815 Mark and his new son--Justin Alexander McDonald--were on the phone together," he said. "Mother and son were all doing fine, and the proud



father was in tears. The timing and the cooperation could not have been better."

Listening in on the proceedings was Eric Boyle, N0YET, in Kansas, who reports Mark McDonald not only was able to speak with his wife and his mother-in-law but got to hear his baby crying for the first time. "This was neat!" he enthused. "It is times like this that make me extremely proud to be part of the Amateur Radio Community!"

For more information on the Maritime Mobile Service Net, visit the Net's Web site <<http://www.mmsn.org/>>.

## **==>ILL WINDS SPAWN NEW MARS NET, GOOD RADIO**

Tropical Storm Barry--never quite a hurricane--proved to be a fizzle for weather watchers. But for Army MARS members in Florida and the Caribbean, Barry offered an opportunity to test a new emergency link. The "H"—or Hotel--Net.

The Hotel Net, formed last May just before the hurricane season, is largely the creation of retired telephone worker Paul Donahue, AG4EZ/AAT4ZS, of Palatka, Florida. Donahue had noticed Puerto Rico members trying to check into Florida's Military Affiliate Radio System nets. He proposed establishing a transcaribbean linkup. By the time the storm warnings were hoisted for Barry, the Hotel Net was ready.

What MARS brings to the table is access to a broad range of military frequencies, with more options for clear propagation and less vulnerability to overcrowding. Designated MARS members also have direct contact with federal disaster relief agencies through the government's National Communications System. By the time Barry died out, 19 stations joined the Hotel Net, including stations in Puerto Rico and the US Virgin Islands and a handful of others along the East Coast. Links were also established to MARS VHF clusters in Florida and Puerto Rico.

At the Ft Huachuca, Arizona, gateway station AAA9USA, contract operator Martha Bochicchio, KD7AIM/AAT9DS, kept her ear to the MARS national "911" frequency in case headquarters support was needed.

NCS Donahue says his goal is to bring the entire Gulf region into the net with stations up the East Coast and with as many VHF clusters as possible reporting into a HF station to relay.-- Bill Sexton, N1IN

## **==>FCC ACCEPTING COMMENTS ON REALLOCATION PROPOSALS**

The FCC is accepting comments on its proposals to reallocate some spectrum in the 2390 to 2400 MHz amateur segment as well as in the non-amateur 1.9 and 2.1 GHz bands for unspecified mobile and fixed services. The 2390-2400 MHz

## **B.V.A.R.A. QRM**

band is a primary Amateur Service allocation. The FCC has proposed including the band and others to support the introduction of advanced wireless services, including third-generation (3G) mobile systems.

The FCC approved its Memorandum Opinion and Order and Further Notice of Proposed Rulemaking August 9 and released it for comment this week. Interested parties may comment on the proposal via the Internet or e-mail using the FCC's Electronic Comment Filing System (ECFS) <<http://www.fcc.gov/e-file/ecfs.html>>. The FCC says that Electronic Comment Filing System users must submit a separate filing for each proceeding listed--in this case ET 00-258, ET 95-18 and IB 99-81. The filings may be identical.

In January 2000 the FCC proposed a number of bands for new, advanced wireless services. The FCC said this month's further proceeding would "supplement the record by providing new allocation options" not included in its January 2000 NPRM.

In the case of 2390-2400 MHz, the FCC notes that, while unlicensed Part 15 devices already share the band with hams, the band has been kept free of services that might be incompatible with amateur use. The FCC now wants to know if these sharing concerns still hold and if they would preclude allocating the band for advanced wireless services.

Noting that Amateur Radio previously shared the band with the federal government, the FCC invited comment on reinstituting such a sharing arrangement. "We also seek comment on the impact on the amateur services of further shared use," the FCC said. The FCC hinted that it might consider again lumping relocated federal government users with amateurs on 2390-2400 MHz, should it reallocate 1755-1850 MHz--now occupied by federal government users--for advanced wireless services.

The ARRL has petitioned the FCC to upgrade the adjacent Amateur Radio allocation at 2400-2402 MHz from secondary to primary status, mainly to protect satellite operations in this band. AO-40 has been successfully using that band for downlink telemetry and transponder operation, and AMSAT plans a similar downlink for its next satellite project. The Amateur Service already is primary at 2402-2417 MHz and secondary at 2417-2450 MHz. The ARRL has re-petitioned the FCC for primary status at 2300 to 2305 MHz.

## **==>AO-40 ATTITUDE CONTROL SYSTEM APPEARS FUNCTIONAL**

The commissioning of the AO-40 satellite recently took another giant step forward as ground controllers reported success in testing the spacecraft's momentum wheel attitude control system. AO-40 controllers hope to use the momentum--or "reaction"--wheel attitude control system to aim its antennas and, eventually, its solar panels. The testing

paves the way for possible deployment of the solar array and better signals on the ground.

"We can say with some caution that we have a working three-axis control system!!!" enthused AMSAT-DL President and AO-40 team member Peter Guelzow, DB2OS, in a posting to the AMSAT bulletin board. Until now, AO-40's attitude has been under "spin control," and that remains an option. The three-axis control offered by the momentum wheels will mean much more positive attitude control from the ground anywhere in the satellite's orbit.

After preliminary tests, ground controllers Stacey Mills, W4SM, and James Miller, G3RUH, ran the momentum wheels up to more than 100 RPM August 16 and left them at that speed for about a half-hour. Telemetry before and after the spinup indicated the system was working properly. The momentum wheels are designed to run at a nominal operating speed of 1000 RPM.

"More tests will be done over the next few weeks, before we will transfer the spacecraft from spin stabilization into three-axis stabilization," Guelzow said.

Correct operation of the momentum wheels is considered essential to solar panel deployment. Ground controllers say the three-axis control system will be tested extensively before any decision is made to deploy AO-40's solar panels.

AMSAT reported last week that the 2.4 GHz "S1" transmitter aboard AO-40 suddenly went silent August 13 and appears lost. The "S2" transponder continues to operate normally.

For more information on AO-40, visit the AMSAT-DL Web site, <http://www.amsat-dl.org/> or the AMSAT-NA Web site, <http://www.amsat.org>.

### ==>AMATEURS COMPLETE FIRST 24-GHZ EARTH-MOON-EARTH QSO

Here's another one for the Amateur Radio record books. On Saturday, August 18, hams in Texas and Manitoba completed the first 24-GHz Earth-Moon-Earth (EME) QSO. The contact followed by several months the first documented echoes from the moon on 24 GHz.

Noted microwave enthusiast Al Ward, W5LUA, of Allen, Texas (EM13), says his QSO with Barry Malowanchuk, VE4MA, in Winnipeg, Manitoba (EN19), was a result of several years of effort in trying to optimize antenna gain and receiver sensitivity, and to obtain adequate power to make the roughly half-million mile path to the moon and back.

"Signals were weak but easily copied at both ends," Ward said. The August 18 QSO took place at 1417 UTC on 24,192 MHz. Malowanchuk said the two exchanged "M" reports.

## B.V.A.R.A. QRM

After many failed attempts, Ward succeeded last March in hearing 24 GHz EME echoes and documenting them for the first time. Such accomplishments on 24 GHz are particularly significant because water-vapor absorption of signals peaks at around that frequency.

VE4MA used a 2.8-meter offset-fed dish and a travelling wave tube amplifier producing 70 W. W5LUA has a 3-meter prime focus dish and a TWT amp producing 80 W. A fixture in the VHF-UHF and microwave standings, Ward was the recipient of the 2000 ARRL Microwave Development Award.

Additional details are on the North Texas Microwave Society Web site, <<http://www.ntms.org>>.

### ==>IN BRIEF:

\* **Hams track police radio interference:** Hams in Middletown, Ohio, helped track down a local amateur who as subsequently arrested August 7 on state charges of "disrupting public services." Authorities allege that Kenneth Kelly, WT2FBI--a Tech Plus licensee--was interfering with police radio calls while using a modified transceiver. The charge is a fourth-degree felony. The FCC has been notified, and Kelly, 28, also could face federal charges. "The alleged offender was repeating what sounded to us to be CB broadcasts onto the police channel," said ARRL member Ernie Howard, W8EH, a city radio maintenance shop employee who was involved in the tracking. Kelly had apparently just moved to the area. Authorities reportedly said the interfering operator also attempted to talk to dispatchers and police officers and made racial slurs and obscene remarks. At a preliminary hearing, Kelly was bound over for possible grand jury indictment. He is being held in lieu of \$25,000 bond.--thanks to Ernie Howard, W8EH, and The Middletown Journal

\* **Club agrees to process NA1SS QSLs:** ARRL Field and Educational Services has announced that the Newington (Connecticut) Amateur Radio League has agreed to handle QSLing duties for NA1SS. The club counts several ARRL staffers among its members. ARRL staffer Margie Bourgoon, KB1DCO, reports that as of the first week of August, the ARRL had received 175 QSL requests for two-way FM voice contacts, 49 for packet QSOs and 77 for listener reports. Among recipients of the first NA1SS cards to be mailed was Jim Romelfanger, K9ZZ, who worked Susan Helms (KC7NHZ) while he was at the WB9FDZ Field Day site. "It's fun to be part of a true ham radio first!" he said. US stations working NA1SS or RS0ISS aboard the International Space Station should send QSLs to Margie Bourgoon, KB1DCO, ARRL, 225 Main St, Newington, CT 06111. A self-addressed, stamped envelope is required to get a QSL in return.

\* **We've never heard this one before:** ARRL staffers have heard a lot of stories from members about how they became interested in Amateur Radio, but, as Assistant Circulation

Manager Kathy Capodicasa, N1GZO, says, "We've never heard this one before!" As she relates the story, she spoke to a mom who had placed an order on behalf of her young son for Now You're Talking and ARRL's Tech Q&A. "When I asked her how her son found out about these titles, she informed me that they had been at the dump and her 11-year-old son started snooping around among the magazines and newspapers dropped off for recycling, and he came across the July issue of QST," Capodicasa said. "She told me that he hasn't been able to put it down since." Of course, and easier--and less messy--way to find out more about Amateur Radio is to visit the ARRL Web site and on-line catalog <<http://www.arrl.org/catalog/>>.

**\* FCC levies \$10,000 fine for unlicensed hamming:** The FCC has levied a \$10,000 fine on an East Palo Alto, California, man for transmitting without a license on amateur frequencies. Earlier this year, the Commission had proposed forfeitures totaling \$17,000 in the case of Joshie Yasin Nakamura Sr, who also is known as "Mervyn Ehambrave" and "Marvin Eugene Barnes." The FCC's Forfeiture Order, released July 6, offered no explanation for the discrepancy in the figures. The fine stemmed from complaints about Nakamura to the FCC that date back to late January through March of 2000. The Commission says it heard from the amateur community and from members of the ARRL Amateur Auxiliary that an unlicensed station was operating on several amateur frequencies. Nakamura reportedly is being detained by state authorities on unrelated felony charges and did not respond to the earlier FCC notice.--FCC

**\* FCC collecting date-of-birth info on Form 605:** With no fanfare or public announcement the FCC began collecting date-of-birth information on its FCC Form 605 earlier this year. The information is a required entry (on line 11a) of the Form 605 as modified in March 2001 for both Amateur Radio and commercial operators, including Restricted Radiotelephone applicants. The FCC has said it's not making the information public but will use it for internal purposes. The FCC stopped collecting and publishing dates of birth several years ago. The National Council of Volunteer Examiner Coordinators' version of the form, NCVEC Form 605--the one most new and upgrading amateur applicants encounter--does not yet require a date of birth, nor is one required at this point of on-line applicants. It's expected to be required in the future, however.

**\* Report--US and Peru share blame in downing of missionary plane:** A binational report says the US and Peru share blame in an April 20 incident that led to the death of US missionary Veronica "Roni" Bowers, KD4CKM, of Michigan, and her infant daughter, Charity, seven months. Bowers, affiliated with the Harrisburg, Pennsylvania-based Association of Baptists for World Evangelism, and the infant were killed when their plane was shot down by the Peruvian Air Force, which erroneously concluded that the plane carried drug traffickers. The Peruvian military claimed that pilot Kevin Donaldson had ignored radio and visual warnings to

## B.V.A.R.A. QRM

land and warning shots. Bowers' husband Jim, KD4CKN, and their son, Cory, were not seriously injured in the incident; Donaldson was shot in the leg. The couple had been serving in Peru since 1993. A report this week faulted both poor communication and lax procedures in the US-Peruvian drug interdiction program for the incident. According to the report, the plane was spotted by a member of the Peruvian military aboard a US Department of Defense aircraft that was chartered by the CIA. US observers had expressed doubts that the plane was involved in narcotics trafficking, but their concerns were not understood soon enough because of language difficulties. The report also concluded that detailed safety procedures to prevent such incidents were not followed. The aerial interdiction program in the region has been suspended. A review of the program is under way. Donaldson managed to ditch the Cessna 185 float plane in the Amazon River.--news accounts

**\* Kodiak Star Amateur Radio payloads get new launch date:** Bob Bruninga, WB4APR, has announced a new launch date of September 17 for the Kodiak Star launch carrying the PCSat, Starshine 3 and Sapphire satellites. All three carry ham radio payloads. They had been set to launch on or about September 1. PCSat is a 1200-baud APRS digipeater for H-Ts and mobiles. Following a brief commissioning period, it will operate on 145.825 MHz. Starshine 3 is a mirror ball with AX.25 9600-baud telemetry on 145.825 MHz, and Sapphire has 1200-baud AX.25 telemetry and a voice replay on 437.1 MHz. Bruninga notes that Starshine 3 will be visible to the eye and will give thousands of students the opportunity to participate in its primary mission of satellite tracking. For more information, visit the PCSat Web site <<http://www.ew.usna.edu/~bruninga/pcsat.html>>, the Sapphire Web site <[http://ssdl.stanford.edu/aa/projects/squirt1/sapphire\\_overview.html](http://ssdl.stanford.edu/aa/projects/squirt1/sapphire_overview.html)> and the Starshine Web site <<http://www.azinet.com/starshine/update012201.html>>. The Athena I launch will be the first planned orbital mission from the Kodiak Launch Complex in Alaska.

**\* New county for Colorado:** County hunters take note. The State of Colorado is gaining a new county. Effective November 15, 2001, the City and County of Broomfield will officially come into existence. Roy Wright, WA0SJQ—who lives in Broomfield--reports that the new county was created to consolidate the City of Broomfield into a single jurisdiction. At present, Broomfield lies within four different counties.

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