

# **CROSSTALK**





Volume 97 Number 1 January 1997



Floyd, KD6GKS (ret.) poses with his XYL, Vivian, KD6NBK.



A few items that were retrieved.



Here is a rare shot of Norm N6NS, and Vivian, KD6NBK.

As promised, here are a few pictures submitted by Vivian, KD6NBK from the last Harbor Cleanup.



Frank Cartier, W6FC, and his wife Gwen, KD6YYW took a moment from their busy day to pose for a picture. This was Frank's last Swapmeet as Manager, but don't worry, Frank says he'll be around to help.

Here is Frank, W6FC turning over his position as Swapmeet Manager to Rich, N6CIZ, the NEW Swapmeet Manager. Congratulations Rich!!

## **TRWARC Monthly Calendar of Events**

## January 1997:

| Tuesday, January 8   | 5:30 pm    | Executive Board Meeting (All Club Members are invited)               |
|----------------------|------------|--|
| Tuesday, January 15  | 5:30 pm    | TRW Cafeteria  |
| Friday, January 17   | 12:00 noon | Technical Chairman's Meeting<br>Building S Hamshack                  |
| Tuesday, TBD         | 12:00 noon | Emergency Communications Team Meeting R3 Emergency Operations Center |
| Saturday, January 27 | 7:00 am    | TRW/ARC Swap Meet  Marine and Aviation (Northeast Corner)            |
| Saturday, January 27 | 12:00 noon | <b>T-Hunt</b> Swap Meet Parking Lot - 144.72 MHz                     |

## **Reoccurring Events:**

| Every Monday Night (Except the 1st & Holidays) | 7:30 pm    | Disaster Communication Systems (DCS) Net DCS Members: Check in on 2 Meter Repeater              |
|--|------------|---|
| Every Wednesday                                | 12:00 noon | ECT Net on 2 meter Repeater   |
| Every Thursday Night                           | 6:30 pm    | TRW Amateur Radio Club Net The Bob and ? Show - Check In on 2 Meter Repeater                    |
| Every Friday Morning                           | 7:30 am    | TRW Amateur Radio Club Breakfast Building S Cafeteria - Everyone is invited Talk-in on 2 Meters |

## **Other Events**

Computer Marketplace (Computer Shows) Hours: 10:00 to 17:00

**POMONA** \$8 admission

January 18 & 19 (Sat. & Sun.) February 8 & 9 (Sat. & Sun.)

Fairplex Exposition Complex Exit Highway 10 at Fairplex Drive.

Go north to McKinley Avenue, turn right. Turn left on White Avenue to Gate 14.

#### **BUENA PARK** \$5 admission

January 5 (Sat.) February 2 (Sun.)

Sequoia Conference CenterTake the Beach Blvd. exit off the 91 Freeway.

Go one block north to 7530 Orangethorpe.

All Shows Open to the Public 10:00 a.m. to 5:00 p.m.

Call for more information (408) 778-5200 or 800-800-5600 Fax# (408) 779-1374

(www.computermarketplace.com)

#### Other Ham Swap meets:

Inland Empire ARC - 2nd Sat. ea. mo. @ A.B. Miller High School, Walnut & Olenander in Fontana - Talk-in 145.480 (-600 pl=77.0hz)

**CMRA** - 3rd Sat. ea. mo. @ DeVry Institute, 901 Corporate Center Dr. **Pomona** - Talk-in 146.175 (+600)

**El Cajon ARC** - 1st Sat. ea. mo. @ Santee Drive-in Theater, Woodside Ave. @ Hwy 67 in **Santee** 

Quoted from The ARRL Letter Online January 17, 1997 (Volume 16, Number 3) Page author: elindquist@arrl.org Page last revised 3:46 PM ET 1/17/97

#### LITTLE LEOs NARROW 2-METER FOCUS TO 146-148 MHZ

In their effort to secure spectrum space that includes the 2-meter and 70-cm ham bands, the Little LEOs have narrowed their focus on 2 meters to the 146 to 148-MHz segment. The industry also appears to be attempting to reposition itself as a potential emergency communication adjunct to ham radio.

The little LEOs will use low-Earth-orbiting satellites to provide position-location and two-way data-messaging services to potential customers around the world. Customers would use small, inexpensive transceivers to communicate with satellites. According to the FCC, potential uses of this service include emergency location in remote areas, environmental data collection, vehicle tracking, and time-sensitive business and personal data communication.

For Region 1, a draft little LEO frequency allocation table has proposed adding a primary mobile-satellite allocation of 146 to 148 MHz to the existing allocations for fixed and mobile (except aeronautical mobile [R] services). The table was contained in a working paper--Document IWG-2A/86 Rev. 3, entitled "New Allocations for the Mobile-Satellite Services Operating Below 1 GHz"--submitted by representatives of the Little LEOs industry to Informal Working Group-2A (IWG-2A) January 7.

The 146 to 148-MHz segment is not a ham band in Region 1, but in Regions 2 and 3, a footnote would be added to state: "Additional allocation: the bands 146-148 and 430-440 MHz are also allocated to the mobile-satellite service, limited to non-geostationary satellite systems, for use only during emergency communication situations as a complement to the amateur service in accordance with Resolution No. 640."

The little LEO proposal also calls for a new primary allocation for the mobile-satellite (space-to-Earth) service for 430-440 MHz in Regions 2 and 3 (ham radio is primary in Region 1), and offers this rationale. "The allocation for the mobile-satellite service within the bands allocated to the amateur service is intended to be a complement to that latter service in situations involving emergency communications as provided for the [sic] Resolution No. 640."

As currently drawn, Resolution 640 covers only the 144 to 146-MHz segment of 2 meters and does not apply at all to 70 cm.

In the 440 to 450-MHz band, where the Amateur Service is not listed in the international table of frequency allocations except by footnote (ham radio is secondary in Australia, the US, Jamaica, the Philippines, and Canada), the little LEOs proposed a new worldwide primary mobile-satellite (space-to-Earth) allocation.

Calling their service "inherently global" the little LEO group said the industry needs "frequency allocations that can be used anywhere in the world," for nongeostationary, nonvoice mobile satellite service through the year 2002. "ITU-R studies indicate sharing is possible," the industry said.

"If the demand for Little LEO spectrum cannot be satisfied by allocations that could be used on a worldwide basis, one solution is to assign different frequencies for use in the various regions of the world from within the allocations to the mobile satellite service," the working paper's preamble said.

Little LEO firms CTA, E-Sat, Final Analysis, GE Starsys, and LEO One submitted the third revision of the lengthy paper--which drew criticism from the ARRL as well as from military and land-mobile

interests and the National Telecommunications and Information Administration--at the January 7 session. The ARRL continued its objection to the inclusion of amateur bands and to the misapplication of Resolution 640. For now, Document IWG-2A/86 Rev. 3 is tabled, but it's expected to come up again at future meetings. IWG-2A meets on January 21 and February 4.

Overall, the little LEOs proposed the following bands for additional allocation to nongeostationary data-only mobile satellite service systems: 138-144, 146-148, 149.9-150.05, 150.05-156.7625, 380-387, 387-390, 390-399.9, 399.9-400.05, 400.15-401, 430-440, 440-450, 470-608 and 614-806 MHz. The paper notes there are proposals concerning 401-406 and 450-470 MHz and for feeder links at 1390-1400 and 1427-1432 MHz in other papers, and that "additional allocation proposals are under construction for the 174-230 MHz band."

For additional information on the little LEOs situation, read the editorial "It Seems to Us . . . " in by ARRL Executive Vice President David Sumner, K1ZZ, in February 1997 QST.

#### **ANOTHER VANITY DELAY?**

Callers to the FCC's Gettysburg, Pennsylvania, office are being told that it might be early March before the FCC resumes processing vanity call sign applications--including all of those received at Gettysburg since the end of November. An FCC spokeswoman this week cited unspecified "computer-related" problems for the potential delay, and said the FCC would release additional details probably next week. "We've been getting a lot of calls," she said.

No vanity applications have been processed since December 19, 1996. While working to resolve the latest problems, Gettysburg personnel will continue to whittle down the stack of some 600 vanity applications that required special handling from the December 19 vanity call sign run. The FCC spokeswoman said that most of the applications in that "work in process" or WIPS stack involve situations where the FCC was unable to grant any of the applicant's call sign requests. However, additional call sign grants have trickled out of Gettysburg as the WIPS applications have been dealt with. The FCC also is in the midst of processing several hundred refunds for earlier unsuccessful vanity filers.

The FCC has not yet announced a date for the opening of Gate 3.

#### HAM-ASTRONAUTS SWAP SPOTS ABOARD MIR

Ham-Astronaut Jerry Linenger, KC5HBR, has become the fourth American to occupy a position on the Russian Space Station Mir, following the docking of Atlantis to the Russian space station late Tuesday. Linenger officially traded places with fellow ham-Astronaut John Blaha, KC5TZQ, when their form-fitted Soyuz seat liners were swapped in the small spacecraft that is used for return to Earth. "We're truly in the space station business," said Blaha, who completed 118 days as a Mir crew member. Linenger will stay aboard Mir until May. Linenger also spent his 42nd birthday (January 16) aboard Mir. "I could not think of a nicer place to have my birthday," Linenger told Dave Larsen, N6CO, during a packet QSO Thursday. Over the past few days, Blaha has been helping to familiarize Linenger with his new home.

During his stay aboard Mir, permission was obtained from the FCC to permit Blaha to engage in third-party communication with unlicensed individuals on Earth. This led to a series of MIREX contacts with several schools. The last contact, on Saturday, January 11, was with pupils at Emerson Elementary School in Snohomish, Washington. The school's technical curriculum specialist Gary Evans e-mailed an enthusiastic note of gratitude to AMSAT's Vice President for Manned Space Programs Frank Bauer, KA3HDO. "It was tremendous! I wish you could have seen for yourself the faces of both the students and their parents as our contact with Mir evolved." Evans

described "an overwhelming sense of being part of a terrific, once-in-a-lifetime experience."

"Most of the parents grew up with the space program, and here it was, right there in the room with us! It was an overwhelming experience. I was not prepared at all for the emotion which this contact caused in my room Saturday morning," Evans said.

It's not known how active on ham radio Linenger expects to be during his stay aboard Mir.

Blaha recently sent a thank-you e-mail note to the SAREX Working Group (SWG) for its work in arranging school QSOs for him while he was aboard Mir. The Naval Oceanographic Office, which assisted the MIREX QSO between Blaha and the Harper McCaughn Elementary School in Diamondhead, Mississippi, is now interested in doing a program similar to SAREX. The Navy wants to use Amateur Radio to allow students to talk to Naval Oceanographic Office employees who are out on exciting expeditions. --NASA/SAREX Working Group

#### SOLAR SUMMARY: GEOMAGNETIC EVENT AFFECTS K INDEX

Solar Seer Tad Cook, KT7H, in Seattle, Washington reports: Average solar flux and sunspot numbers for the past week were almost unchanged from the week previous, but there was some noticeable geomagnetic activity. A coronal mass ejection from the Sun on January 6 caused a disturbance four to five days later when a magnetic plasma cloud caused a severe storm at high latitudes. The planetary K index rose as high as 6 on January 10 at 0600 and 0900 UTC. The planetary A index for the day was 31.

Over the next few weeks the solar flux should stay around the low to mid-70s, probably 72 to 74 most of the time. Some slightly unsettled conditions may appear around January 26, and again from February 3 to February 8, with some possibly unstable conditions on February 6 and 7. Expect 160 and 80 meters to yield some good conditions, with solar flux low and the nights long.

A wire service story this week said that scientists from NASA and the astronomy department at Yale University presented findings at a meeting of the American Astronomical Society in Toronto which predicted a decrease in overall solar activity for the next solar cycle. They admitted that their forecast was at odds with many other predictions, and that solar activity is highly unpredictable. But the scientists said that if their prediction is correct, it will reverse what they claim is an overall 400-year trend toward greater solar activity.

Sunspot numbers for January 9 through 15 were 12, 13, 12, 0, 0, 0 and 14, respectively, with a mean of 7.3. The 10.7-cm flux was 73.7, 75.4, 74, 74.5, 74.6, 74.9 and 75.8, respectively, with a mean of 74.7. The estimated planetary A indices for the same period were 6, 31, 13, 10, 5, 4, and 4, respectively, with a mean of 10.4.



## TRW AMATEUR RADIO CLUB MEMBERSHIP APPLICATION



#### **COMPLETE BOTH SIDES!**

### ALL APPLICANTS (Please Print Clearly):

| Name:   | Date:                |   |                                     |  |
|---|----------------------|---|-------------------------------------|--|
| Amateur Call Sign:  |                      |   |                                     |  |
| Student under age 18?   |                      |   |                                     |  |
| Home Address:   |                      |   |                                     |  |
| City:   | Sta                  | ate: 2                                    | Zip:                                |  |
| Home Phone Number: (  | )                    |   |                                     |  |
| E-Mail Address (if any):  |                      |   |                                     |  |
| CURRI   | ENT TRW SPACE        | E PARK EMPLO                              | YEES ONLY:                          |  |
| Badge Number:   | CCC:                 | Phon                                      | e:                                  |  |
| Mail Station: Building:   | R                    | oom:                                      |                                     |  |
| FAMILY MEMBERS  | S OF TRW SPAC        | E PARK EMPLO                              | YEES AND RETIREES: *                |  |
| Name:   | Call:                | Class:                                    |                                     |  |
| * Family members of Non-T   |                      | Employees are <i>n</i> parate application | ot eligible for family memberships. |  |
| =   | =========            | ========                                  |                                     |  |
| DUES:   |                      | TRW/ARC                                   | CLUB BADGE ORDER:                   |  |
| TRW Employee (\$5.00)<br>TRW Retiree (\$6.00) **<br>Non-TRW (\$10.00)<br>TRW Family Members (\$6.00)<br>Club Badge (\$5.00) | \$<br>\$<br>\$<br>\$ |   | CALL<br>FIRST NAME                  |  |
| TOTAL AMOUNT DUE:   | \$                   | <br> <br>                                 |                                     |  |
| ** Retirees: TRW Badge No   |                      | I   |                                     |  |

| =  | CONTINUED ON BACK>   |
|--|--|
| PLEASE INDICATE THE CLUB ACTIVITIES YOU COMING YEAR:   | U WOULD LIKE TO PARTICIPATE IN DURING THE  |
| W6TRW Field Day Contest (HF and VHF) Emergency Communications Picnics TRW/ARC Swapmeet Technical Challenges Training  PLEASE INDICATE YOUR INTERESTS IN AMAGE  | Monthly Club MeetingsClub BreakfastsUsing the Club ShackClub LibraryAntenna PartiesRepeatersOther:   |
| and are prorated on a quarterly basis t<br>TRW Amateur Ra  TRW AM  Member  One Spa   | SSTV AMTOR CW DX Computers DCS/RACES/ARES QRP Other: st to January 31st. Dues are payable in January hereafter. Please make checks payable to: dio Club and send to: MATEUR RADIO CLUB ship Chairman, S/1156 ace Park Drive o Beach, CA 90278  |
| ======================================   | SE OF ALL CLAIMS   |
| I, the undersigned, intending to be legally bound, hereby fully and finally waive, release and hold Space Park Employees Association, TRW, Inc., officers, employees, members, agents and assignates of action, injuries, judgments or other data. | EA Amateur Radio Club and any and all of its events, for myself, my heirs, executors and administrators, do harmless the TRW/SEA Amateur Radio Club, TRW an Ohio corporation, and their respective directors, gnees from any and all responsibility, liability, claims, amages of any nature whatsoever, including, but not ectly or indirectly resulting from my participation in, or |
| insistence and request and that I voluntarily do so  | •  |
| Signature:   | Date:  |

## **TRW AMATEUR RADIO CLUB**

| ELECTED OFFICERS President Vice President Secretary Treasurer  | Bob Briggs<br>Pat Anderson<br>Nina Whiddon<br>Jan Parker   | KD6WYQ<br>KB6YPI<br>KN6FL<br>KD6AKD  | R8 / 2188<br>M2 / 1569<br>O1 / 2070<br>R4 / 2058  | (310) 813-2622<br>(310) 813-6874<br>(310) 813-9351<br>(310) 812-1081   |  |
|--|--|--|---|--|--|
| APPOINTED STAFF Activities Chairperson Crosstalk Editor Emergency Coordinator Librarian/Asst. Postmaster Membership Chairperson Past President QSL Manager 447 Repeater Autopatch SEA Representative Swap Meet Manager SYSOP (Telephone BBS) Technical Chairperson Training Chairperson Trustee of W6TRW License   | Greg Martens Duane Park OPEN Steve Papa Jerry Dean Frank Cartier Bryan DeAro Pat Anderson Elizabeth Twyford Rich Sauer Ron Hoffman Chris Wachs Bryan DeAro Frank Cartier | N6RRY<br>WA6EIK<br>KO6VF<br>WA6GVO<br>W6FC<br>KN6OW<br>KB6YPI<br>KS4IS<br>N6CIZ<br>KE6OJD<br>WA2KDL<br>KN6OW<br>W6FC | M1 / 1275<br>M3 / 2261BO<br>M5 / 1263<br>R2 / 1036<br>O1 / 1210<br>120 / 1020B<br>M2 / 1569<br>D1 / 1024<br>R9 / 2849<br>M4 / 2031C<br>R7A / 2100<br>120 / 1020B<br>O1 / 1210 | (310) 813-4049<br>(310) 813-4219<br>(310) 812-5305<br>(310) 812-0770<br>(310) 812-2292<br>(310) 812-4789<br>(310) 813-6874<br>(310) 813-5869<br>(310) 813-5869<br>(310) 814-9126<br>(310) 813-1506<br>(310) 812-4789<br>(310) 812-2292 |  |
| TRW/ARC Telephone Computer BBS (24 hrs, 300-14,400 Baud, 8-N-1) (310) 768-3399 TRW/ARC Hotline (Club Answering Machine) (310) 813-8569 W6TRW 2 Meter Repeater (Open Repeater) 145.32 (-600) PL 114.8Hz W6TRW UHF Repeater (Open Repeater / Closed Autopatch) 447.00 (-5 MHz) PL 100 Hz W6TRW-3 Packet Radio Internet Gateway and BBS (1200 Baud Port) 146.745 (-600) W6TRW Internet Home Page http://w6trw.sp.trw.com/w6trw/ |  |  |   |  |  |

TRW Amateur Radio Club One Space Park S/1156 Redondo Beach, CA 90278

**FIRST CLASS** 

| D | )eliver | To: |  |  |
|---|---------|-----|--|--|
|   |         |     |  |  |
|   |         |     |  |  |
|   |         |     |  |  |