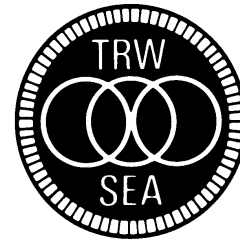




CROSSTALK

News Bulletin of the TRW Amateur Radio Club



Volume 98 Number 2

February 1998

Editor's Corner:

RENEWRENEWRENEWRENEW RENEWRENEWRENEWRENEW RENEWRENEWRENEW!

It's that time again this year to renew your club dues!!!! I have enclosed a membership application. Please return it ASAP.....

BANQUET QUESTIONNAIRE :

I had a unimpressive 3 people return there forms to me, this tells me that the membership is very happy with the present Banquet configuration.

STILL MISSING IN ACTION

I have been told that a 440 amplifier, and a 1.2ghz SWR/PWR meter is still missing from one of the club shacks..... If you have seen them, or know who is using them, please return them to the S Shack ASAP. The normal policy to borrow a piece of equipment is to contact the shackmasters (Dave Nelson Bldg. S, & Duane Park or Rick Ervin for Bldg. R3).

IT'S THOMAS FOR WOLF ABOARD MIR *reprinted from the ARRL Letter Volume 17, Number 4*

The last US astronaut to serve on Mir, Australian-born Andy Thomas, KD5CHF/VK5MIR, replaces astronaut David Wolf, KC5VPF, aboard Mir this coming week. Wolf has lived on Mir since late September. The Australian government issued Thomas a reciprocal license with a special event call sign for his use while aboard Mir. Thomas is from Adelaide, South Australia (VK5). It's not yet known how active Thomas will be on ham radio.

Thomas blasted off from Kennedy Space Center Thursday, January 22, aboard the shuttle Endeavor. The shuttle was scheduled to dock with Mir on Saturday, January 24. Two new Russian crew members, cosmonauts Talgat Musabayev, R03FT, and Nikolai Budarin, RV3FB (ex-RV3DB and MIR), are set to arrive in late January in the first crew change of the year. French astronaut Leopold Eyharts will arrive with the new crew members to work aboard Mir for three weeks before returning to earth with Anatoly Solovyov and Pavel Vinogradov, the previous Mir Russian contingent.

Thomas, 46, will work aboard Mir until June, when the US shuttle Discovery will dock with Mir for the final time, rounding out the Russian-US cooperative mission. Thomas prepared for his four-month tour of duty on the space outpost by taking along several dozen books, cassettes and CDs, and computer programs. Among his selections was Mark Twain's Huckleberry Finn.--thanks to Roy Neal, K6DUE

TRWARC Monthly Calendar of Events

First Tuesday of each month	5:30 pm	Executive Board Meeting (All Club Members are invited)
Second Tuesday of each month	5:30 pm	Club Meeting Round Table Pizza, (Redondo Bch. & Hawthorne)
Second Tuesday of each month	12:00 noon	Emergency Communications Team Meeting R3 Emergency Operations Center
Last Saturday of each month	7:00 am	TRW/ARC Swap Meet Marine and Aviation (Northeast Corner)
After the Swapmeet	12:00 noon	T-Hunt 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 All Amateurs Welcome
Every Thursday Night (Schedule permitting)	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 Fair (previously The Computer Marketplace Computer Shows) **Hours: 10:00 to 17:00**

POMONA \$8 admission

Live Broadcasts: KFI-Jeff Levy "On Computers", KZLA, Y-107FM

February 7 & 8 (Sat. & Sun.)

February 28 & March 1 (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.

RESEDA \$3 admission

March 7 (Sat.)

Sherman Square Entertainment Center From the 101 Freeway take the Reseda offramp,

go north to Sherman Way and turn right. Go one block to Canby Street. 18430 Sherman Way.

BUENA PARK \$5 admission

February 1, 1998 (Sun.)

Sequoia Conference Center Take 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

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)

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



MEMBERSHIP APPLICATION

COMPLETE BOTH SIDES!

Name: _____ Date: _____

Amateur Call Sign: _____ License Class: _____

Student under age 18? _____ ARRL Member? _____

=====

CURRENT TRW SPACE PARK EMPLOYEES ONLY:

Badge Number: _____ CCC: _____ Phone: _____

Mail Station: Building: _____ Room: _____

=====

ALL APPLICANTS:

Home Address: _____

City: _____ State: _____ Zip: _____

Home Phone Number: (____) _____-_____

Please provide ways to contact you or to send club bulletins, e.g. email address (home and/or work), fax no. cell phone, pager, or other:

=====

FAMILY MEMBERS OF TRW SPACE PARK EMPLOYEES AND RETIREES *

Name: _____ Call: _____ Class: _____

* Family members of Non-TRW Space Park Employees are not eligible for family memberships. Submit a separate application.

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DUES**TRW/ARC CLUB BADGE ORDER:**

TRW Employee (\$5.00)	\$	_____
TRW Retiree (\$6.00) **	\$	_____
Non-TRW (\$10.00)	\$	_____
TRW Family Members (\$6.00)	\$	_____
Club Badge (\$5.00)	\$	_____

CALL

TOTAL AMOUNT DUE: \$ _____

FIRST NAME

=====

** Retirees - List TRW Badge No. _____

CONTINUED ON BACK ----->

PLEASE INDICATE THE CLUB ACTIVITIES YOU WOULD LIKE TO PARTICIPATE IN DURING THE COMING YEAR:

- | | |
|--------------------------------|-----------------------------|
| _____ W6TRW Field Day | _____ Monthly Club Meetings |
| _____ Contest (HF and VHF) | _____ Club Breakfasts |
| _____ Emergency Communications | _____ Using the Club Shack |
| _____ Picnics | _____ Club Library |
| _____ TRW/ARC Swapmeet | _____ Antenna Parties |
| _____ Technical Challenges | _____ Repeaters |
| _____ Training | _____ Other: _____ |

PLEASE INDICATE YOUR INTERESTS IN AMATEUR RADIO:

- | | |
|-----------------|----------------------|
| _____ HF | _____ SSTV |
| _____ VHF | _____ AMTOR |
| _____ UHF | _____ CW |
| _____ Microwave | _____ DX |
| _____ Packet | _____ Computers |
| _____ OSCAR | _____ DCS/RACES/ARES |
| _____ RTTY | _____ QRP |
| _____ ATV | _____ Other: _____ |

What do you like best about the TRW ARC?

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FULL RELEASE OF ALL CLAIMS

In consideration of my participation in the TRW/SEA Amateur Radio Club and any and all of its events, I, the undersigned, intending to be legally bound, for myself, my heirs, executors and administrators, do hereby fully and finally waive, release and hold harmless the TRW/SEA Amateur Radio Club, TRW Space Park Employees Association, TRW, Inc., and Ohio corporation, and their respective directors, officers, employees, members, agents and assignees from any and all responsibility, liability, claims, causes of action, injuries, judgments or other damages of any nature whatsoever, including, but not limited to, any personal injuries I might suffer, directly or indirectly resulting from my participation in, or travel to and from the aforesaid activity.

I acknowledge that I am engaging in the aforesaid activity, and knowingly executing this Release, at my insistence and request and that I voluntarily do so without any coercion whatsoever.

Signature: _____ **Date:** _____

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The membership year runs from February 1st to January 31st. Dues are payable in January and are prorated on a quarterly basis thereafter. Please make checks payable to **TRW AMATEUR RADIO CLUB** and send to:

TRW AMATEUR RADIO CLUB
 Membership Chairman, S/1156
 One Space Park Drive
 Redondo Beach, CA 90278

From The Office of the President...

Rich Sauer, N6CIZ, President, TRW Amateur Radio Club

Belated Happy New Year to all! This marks my first column since being elected President of the TRW Amateur Radio Club and I want to thank all of you for entrusting me with this job. I hope to make 1998 one of the best years ever for the club and its members. To that end, I plan to write a monthly column for *Crosstalk* and encourage our other elected and appointed officers to do the same. In this way, you will be kept informed of what's happening with the club and (hopefully) be inspired to join in the fun!



Before going any further, I'd like to say Thank You to our outgoing officers. Bob Briggs, KD6WYQ, has done an outstanding job as President over the past two years. In many an Executive Board meeting Bob has been the voice of reason and his steady hand has helped the club grow and prosper. Now in his new board position as Immediate Past President, I'll be leaning on him and looking for his support.

Pat Anderson, KB6YPI, has been a great Vice President and I know he'll do a fine job as the club's new Secretary. Pat has also held down other positions within the club (Autopatch Czar and Banquet Co-Chair come to mind) and I hope we can count on him to continue to help in these areas as well.

Thanks also to Nina Whiddon, KN6FL, who has been the club's Secretary. She has somehow managed to make order out of the chaos of the Executive Board meetings and typed up a terrific summary of the meetings in her minutes. Without this written history, we'd *never* know what we were doing from month to month!

Jan Parker, KD6AKD, has really done an excellent job as the Club's Treasurer - the toughest job in the club! It's a lot more than keeping the checkbook balanced. Jan has been proactive in creating and balancing our budget throughout the year. She's dealt with bounced checks, nasty bank cashiers, endless budget requests and, through it all, always kept a sense of humor and purpose.

Finally, a big thank you to the other volunteers whose names you see every month on the back of *Crosstalk*. You gals and guys make the club what it is and we couldn't survive without you!

Now, on to 98! Welcome the new officers who have volunteered their time to help the club *this* year. Vice President Elizabeth Kunkee, KS4IS, Secretary Pat Anderson, KB6YPI, and Treasurer Steve Lambert, KF6KIC. There will also be some shuffling of the Appointed Staff as people take on new challenges.

I think that 1998 will be a fun and exciting year for the club. We're planning picnics, field day, HF and VHF contests, in addition to our monthly meetings and swap meets. I hope you take advantage of everything your club has to offer. Fill out your membership application for this year, mail it in, and we'll see you at a club event!

73 de N6CIZ.

HAM RADIO SAVES THE DAY IN ICE STORM'S WAKE

reprinted from the ARRL Letter Volume 17, Number 4

Some ham radio emergency communication operations across the Northeast wound down this week as the ice storm disaster moved from the response to the recovery phase. Telephone service and electricity are being slowly restored, but in many areas ham radio remains a primary--and in some cases the only--means of communication. And barely more than two weeks after the initial disaster, New Yorkers were bracing for the possibility of additional severe ice storms. The story to date is one of a great ham radio response peppered with small acts of heroism and dedication.

Hams--in many cases working as ARES and RACES volunteers--continued to operate from emergency operation centers, shelters, meals centers, and government offices throughout the region. In New York alone, more than 1000 people are still living in shelters. ARES and RACES groups were cooperating with the American Red Cross, the Salvation Army, and government agencies, including the National Guard.

Repairs to the utility infrastructure are expected to take months. Ice loading from the storm brought down utility poles (one estimate said 180,000 poles in New York will have to be replaced), countless trees, and even steel transmission-line towers. Several deaths were attributed to the ice storm, and damage estimates ranged in the billions of dollars. Ham volunteers too numerous to mention mustered to help and many have been on the job for more than a week straight. Simplex and HF became the rule in some areas as repeaters were brought down by a lack of power or storm damage. Some repeaters were brought back up on emergency power. For a look at the storm response in New York, see <http://www.nysemo.state.ny.us/IceStorm98/teamwork/>.

The initial response to the ice storm disaster would not have been possible without ham radio, according to Jim Edmonds, WA1KPG, who lives near Syracuse, New York. "Everything was knocked out," he said. "I've never seen a situation where everything was so dependent on ham radio." A Civil Air Patrol group commander, Edmonds was called in January 8 by CAP and soon found himself at the Syracuse Red Cross office, training disaster relief volunteers and coordinating ham radio efforts on behalf of the Red Cross. "The first request by the Red Cross and the New York State Emergency Management office was, please send us all your hams'," he said. His wife, Sue, N2GNN, also helped out.

Across the Empire State, other hams worked with Red Cross damage assessment teams. Steve Auyer, N2TKX, said many hams in unaffected parts of the state took time away from work to help out in the disaster areas, staying in the shelters for days at a time. Offers of help came from New York City ARES/RACES and from as far away as Minnesota, where residents had to deal with floods and ice last year.

ARRL PIC Viv Douglas, WA2PUU, in Syracuse reports that a number of hams from Western New York traveled from shelter to shelter in hard-hit Jefferson County moving out health-and-welfare traffic. Ham radio was even able to get word to a Naval officer at sea, concerned for the safety of his elderly mother who lived alone, that she was safe and had been moved to a shelter. Edmonds told of how hams used multiple relays to dispatch an ambulance to an injured elderly man in Potsdam, New York, who had managed to get word to his daughter via his almost-dead cell phone. The whole process took ten minutes. Douglas said ham radio became a focal point in the shelters, too. "When updated condition reports were being given over the ham radio, people would run to cluster around. It became apparent that ham radio was the lifeline to the outside world for communication," she reports. "Many watching asked how they could get into ham radio so it would be available to them during times like this. It became a teaching experience." As Jim Edmonds put it: "The guy on the street corner with the hand-held saved the day." In some areas of New England, new snowfall hampered recovery efforts. That was the case in Vermont, where six northern counties were declared disaster areas and more than a foot of additional snow fell in the ice storm's wake. Throughout the region, stores quickly sold out of portable generators and other emergency supplies. Out-of-state line crews were

HAM RADIO SAVES THE DAY IN ICE STORM'S WAKE cont.

called into help restore electricity. In New York, National Guard generators moved from dairy farm to dairy farm so herds could be milked--and thus saved.

All 16 Maine counties eventually were declared disaster areas. State RACES Director Rod Scribner, KA1RFD ("Ready for Disaster"), said about half of the state's repeaters were not working after the storm, but the wide-coverage KQ1L machine on 146.85 MHz in Dixmont stayed up and got a lot of use. It was that repeater that Vice President Al Gore spoke over from RACES Headquarters when he visited the state capital to survey the damage earlier this month. Scribner said parts of Maine are still without electrical power, and he praised the efforts of hams there in dealing with the emergency--which he characterized as the most serious he'd ever seen in terms of the number of people affected. "I think ham radio really did a yeoman's job in the areas affected," he said this week. Scribner singled out for special mention Maine SM Michelle Mann, W1GU (who has an infant at home), as well as Mike Smith, N1UHR, who camped out in the Waldo County EOC for a week and helped handle local, door-to-door health-and-welfare checks on rural residents, and Max Jacques, K1MAX, who helped organize a Red Cross meals program in the Winthrop vicinity.

Husband and wife Red Cross volunteers Connie Morrison, N1OCE, and Paul Shapter, N1SWM, of Worcester, Massachusetts, just back from three weeks assisting in the Typhoon Paka recovery on Guam, were called in to help with ice storm relief efforts in Maine. Morrison is an attorney and a registered nurse, while Shapter is an accountant. Although her work did not involve disaster communication, Morrison carried along her dual-band H-T on both trips just in case she needed it. North of the Border, the Province of Quebec was especially hard hit with ice damage and power and telephone blackouts. "The scope of this emergency is beyond the meaning of the word catastrophic," said RAC Quebec Director Daniel Lamoureux, VE2ZDL. Hams in affected areas set up round-the-clock emergency nets and assisted in the relief effort. Without Amateur Radio, "there is absolutely no way that many emergency and support activities could have taken place," said The Canadian Amateur Editor Rob Ludlow, VE3YE.--This Week in Amateur Radio; RAC; Albert Hayeck, N1EFR; and many others

VICE PRESIDENT VISITS VIA HAM RADIO reprinted from the ARRL Letter Volume 16, Number 3

Vice President Al Gore visited the ice-storm stricken areas of Maine in January. While there, he got a chance to visit via ham radio with Clarence Rider, AA1PN, in Exeter, Maine, to get an idea of how the weather emergency had affected residents in that part of the state. Gore spoke from the RACES station at the State House in the capital city of Augusta.

Maine SM Michelle Mann, W1GU, in Monmouth, says telephone service remained intact over most of the state, but Maine hams have responded to help out with some communication tasks as needed. "Several have been helping with the Winthrop shelter doing communications for a makeshift meals-on-wheels program, getting food to the elderly in the area that are still sticking it out at home," she said. Maine RACES Director Rod Scribner, KA1RFD, has been manning the radio station at the State House. Mann reports he's handled some message traffic to and from areas where telephone service was knocked out. Mann says Maine hams, in general, have been monitoring 146.52 simplex since many repeaters are down. Repeaters in the Bangor and Portland areas are working okay and have been providing reliable communication, however.

Mann says hams in other areas of the state have been providing communication for local emergency management offices.

AMSAT-NA CONSIDERS COMMERCIAL VENTURES

reprinted from the ARRL Letter Volume 16, Number 3

AMSAT-NA President Bill Tynan, W3XO, says AMSAT may go commercial to keep its Orlando, Florida, Lab afloat. In an interview, Tynan told the 200th meeting of the Houston AMSAT Net January 6 that AMSAT needs to keep the Orlando Integration Lab "or a facility of that type" going and that the organization is looking into several commercial ventures to help fund future projects and activities.

Tynan said revenue from commercial projects would give AMSAT flexibility in pursuing future Amateur Radio satellite projects and additional commercial work. "I can assure you that unless we can find some way to get a significant amount of money into the organization, we cannot keep Orlando going. We're going to have to shut it down," Tynan told the on-air gathering. One commercial prospect is the Canadian MOST proposal. Tynan said the project's sponsors have "promised us a significant financial donation" if AMSAT participates in the project, assuming it's eventually funded by the Canadian government.

AMSAT-NA Vice President for Operations Keith Baker, KB1SF, echoed Tynan's concerns. Baker, who also was interviewed for the Houston AMSAT Net, said that one lesson learned from Phase 3D is that AMSAT can no longer "stand on the corner with our hands out" to fund future endeavors. Baker said AMSAT-NA wants to pursue additional revenue sources "without damaging or putting into jeopardy the volunteer spirit of AMSAT."

Phase 3D Integration Lab Manager Lou McFadin, W5DID, said most of the modules for the spacecraft have been installed. Technicians now are installing the rest of the electronic components. Also on the Net, AMSAT Vice President of Manned Space Flight Frank Bauer, KA3HDO, discussed ham radio equipment aboard the International Space Station. Bauer said the first ham gear aboard the ISS later this year will include H-Ts for 2 meters and 70 cm, a packet radio system, and a "digi-talker" that's being developed by hams in Germany.

Bruce Paige, KK5DO, moderates the Houston AMSAT Net. A RealAudio transcription of the entire 200th Houston AMSAT Net (and other net sessions) is available at <http://www.amsatnet.com>.--AMSAT News Service via Bruce Paige, KK5DO

TRW ARC Call sign???

Does anyone out there know the year or the date that TRW obtained the W6TRW call sign? I've been able to bracket between 1973 and 1975 from awards I found in the shack, but no better. (Use the average, 1974?) Dave Nelson AB6DU

More new call signs:

reprinted from the ARRL Letter Volume 16, Number 3

The FCC on January 14 processed more vanity call sign receipts. Gettysburg has processed all applications received through December 12, 1997, including all work in process or WIPs. Notable among the most recent batch was a new call sign for ARRL President Rod Stafford, who is now W6ROD (he was KB6ZV). Lots of other call sign "name suffix" combinations were granted in the most recent vanity batch. ARRL Hudson Division Vice Director JP Kleinhaus, W2XX, was able to obtain W2AA for the "Big Gun Contest Club" of which he is the trustee. Eastern New York DEC April Stack, formerly KA2QIG, got K2ZCZ, the former call sign of New York Governor George Pataki.

SOLAR UPDATE *reprinted from the ARRL Letter Volume 17, Number 4*

Solar prognosticator Tad Cook, K7VVV, Seattle, Washington, reports: Solar activity was only slightly higher over the past seven days compared to last week. Average solar flux was up only about three points, but the average sunspot number was about double from the week previous. Average solar flux for the previous 90 days moved from 95 to 96 this week, but flux values were above 96 only two days out of the reporting week. This observation is consistent with the relatively flat nature of recent conditions in the current solar cycle. Solar flux for this weekend is predicted to be around 92, with some geomagnetic instability resulting in a projected A index of around 12. This is not terrible news for the CQ Worldwide 160 meter CW Contest this weekend, but not as good as some recent conditions, where A and K indices were down near zero. Solar flux is expected to dip soon into the high 80s, then rise above 90 again around February 3. This is all based on the previous solar rotation, so all HF operators can hope for are some new sunspot groups to liven up the bands.

Sunspot numbers for January 15 through 21 were 46, 88, 89, 67, 88, 50, and 25, with a mean of 64.7. The 10.7-cm flux was 97.8, 97.5, 95.9, 95.1, 93.5, 91.4, and 90.9, with a mean of 94.6, and estimated planetary A indices were 3, 8, 5, 9, 4, 11, and 8, with a mean of 6.9. The ARRL DX Bulletin notes this week that FT5X/FR5HR is active from Kerguelen Islands around 0200 UTC on 20 meters and 1400 UTC on 17 meters. Conditions from most of the US to Kerguelen don't look good at those times on those bands, but 17 meters may be possible from the East Coast. The further south one is in this hemisphere though, the better the odds. Conditions to Kerguelen from South America and the Caribbean on 20 meters should be quite good around 0200 UTC.

Patty Loveless, KD4WUJ, tops Grammy nominations: Having wowed the critics with her album Long Stretch of Lonesome, Patty Loveless, KD4WUJ, was rewarded with three Grammy nominations. In addition to best album, she was nominated for best female country vocal performance for "The Trouble With The Truth" and best country vocal collaboration for "You Don't Seem to Miss Me" with the legendary George Jones. Loveless' three nominations make her country music's leading Grammy contender. The Grammys will be awarded February 25.

Raft /mm station active: HLØJQT/mm aboard a research raft in the East Korean Sea will continue to be active a few hours per day until the end of January on 40, 15, and 10-meter SSB (7.085, 21.220, and 28.220 MHz respectively). QSL to HLØBLA, PO Box 93, Pusan 600-600, Republic of Korea. The raft, which has a sail but no engine, is attempting a voyage from Vladivostok, Russia, to Che ju Island, South Korea, as part of historical research into the ancient Barhae Dynasty.—HLØBLA

Winter Games special event: Special event station 8NØWOG will operate from February 7 through February 22 during the XVIII Olympic Winter Games in Nagano Japan. The station will be sponsored by the Japan Amateur Radio League and will be available for operation by amateurs from any country. If you're planning to be in Nagano for the games, don't forget your Amateur Radio license. 8NØWOG will be at the Nagano City Warm-Hearty (Fureai-Fukushi) Center, 1714-5, Midori-cho, Nagano. Operating hours will be 0930 until 2100 JST. HF bands will include 160 through 10 meters, SSB and CW. The station also will operate on VHF and UHF. For more information, contact Kimihiko Koyanagi, JAØTBJ, e-mail ja0tbj@mx2.nisiq.net.--The JARL News

TRW AMATEUR RADIO CLUB

ELECTED OFFICERS

President	Rich Sauer	N6CIZ	R9 / 1869	(310) 813-5869
Vice President	Elizabeth Kunkee	KS4IS	D1 / 1024	(310) 813-0524
Secretary	Pat Anderson	KB6YPI	R7A /1265	(310) 813-6874
Treasurer	Steve Lambert	KF6KIC	R6 / 2529	(310) 812-5019

APPOINTED STAFF

447 Repeater Autopatch	Pat Anderson	KB6YPI	R7A /1265	(310) 813-6874
Activities Chair/Asst Swapmt	Greg Martens	N6RRY	M1 / 1275	(310) 813-4049
Crosstalk Editor	Duane Park	WA6EIK	M2N / 1368B	(310) 813-4219
Emer. Comm. Coordinator	Rick Ervin	KD6OZD	R3 / 1098	(310) 812-2039
Librarian/Asst. Postmaster	Steve Papa	KO6VF	M5 / 1263	(310) 812-5305
Membership Chairperson	Dave Nelson	AB6DU	R8 / 2144	(310) 813-9775
Past President	Bob Briggs	KD6WYQ	M7 / 2439	(310) 813-2622
Publicity Chairperson	Dave Nelson	AB6DU	R8 / 2144	(310) 813-9775
QSL Manager	Bryan DeAro	KN6OW	120 / 1020B	(310) 812-4789
S.P. Packet/Internet Sysop	Chris Wachs	WA2KDL	R7A / 2100	(310) 813-1506
SEA Representative	Nina Whiddon	KN6FL	01 / 1020	(310) 813-9391
Swap Meet Manager	Rich Sauer	N6CIZ	R9 / 1869	(310) 813-5869
Technical Chairperson	John Cheatham	KE6OJM	R9 / 2838	(310) 813-5903
Training Chairperson	Bryan DeAro	KN6OW	120 / 1020B	(310) 812-4789
Trustee of W6TRW License	Elizabeth Kunkee	KS4IS	D1 / 1024	(310) 813-0524

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

Deliver To:

