



CROSSTALK

News Bulletin of the TRW Amateur Radio Club



Volume 97 Number 4

April 1997

Editor's Notes:

I'm going to change the "Calendar of Events" format in the coming months, I will try to provide more visibility and show future planned events. Please keep in mind that we still haven't picked out a standard place to conduct the club meetings, also in the summer, the club meetings may be held at noontime at Poliwog Park like last year.

Since I wear dual hats, as Emergency Communications Coordinator, I would like to personally thank all of the ECT members that responded to the 05 emergency on April 1. As always, there is nothing like the "real thing" when it comes to training, and I think everyone did a super job.

Attention Club Members: Have you paid your 1997 dues??

CQ WW WPX Contest, phone, sponsored by CQ magazine, 0000Z Mar 29 to 2400Z Mar 30 (CW is May 24-25). Single ops operate no more than 36 hours, off periods must be 60 min or more. Classes: single op single/all band, high, low (<100 W), QRP (<5 W) or assisted; multi-single (10-minute rule); multi-multi; rookie; tribander and single element; and band-restricted. Send RS(T) and serial no. Score 3 pts/QSO w/different continents on 14-28 MHz and 6 pts/QSO w/different continents on 1.8-7 MHz; score 2 pts/QSO w/stations in North America on 14-28 MHz and 4 pts/QSO w/NA stations on 1.8- 7 MHz. Stations in own country count zero points but are valid for multipliers. Multipliers are prefixes worked (eg, N8, KA1, HG73, JD1). Work stations once/band; prefixes count only once. Awards. Club competition. Send logs by May 10 (CW, Jul 10) to CQ magazine, 76 N Broadway, Hicksville NY 11801 or e-mail them to n8bjq@erinet.com.

Ten-Ten International Net Spring CW Contest, sponsored by Ten-Ten International, from 0000Z May 3 until 2400Z May 4. Single op only, CW and RTTY, 10 meters only. Contacts must be in CW subband. Send call, name, state and 10-10 number (if member). Score 1 pt/QSO w/nonmembers and 2 pts/QSO w/members. Final score is QSO pts. Send logs by Jun 1 to Don Zielinski, K0PVI, 10-X International Contest Manager, c/o Bighorn Museum of Amateur Radio, POB DX, Genoa, CO 80818-0119.

Mark you calendars, The ARRL SW Division Convention will be Riverside this year in September, see the form in this issue.

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 Location varies at this time
Last Friday of each month	12:00 noon	Technical Chairman's Meeting Building S Hamshack
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
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 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

April 19 & 20 (Sat. & Sun.) May 17 & 18 (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

April 5 (Sat.) May 3 (Sat.) May 31 (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

April 6 (Sun.) May 4 (Sun.) June 1 (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

Don't forget: ACP Super Sale (ACP Computer Swapmeet) May 18th

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)

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

PHASE 3D LAUNCH PUT OFF UNTIL SEPTEMBER *(quoted from the ARRL Letter Vol 16, #13)*

Modifications to the Ariane 5 rocket's electrical systems and software will mean another costly delay for the Phase 3D Amateur Radio satellite. The European Space Agency (ESA) announced March 24, that the Ariane 502 which will carry Phase 3D aloft from Kourou, French Guyana, has been rescheduled for a mid-September launch. ESA said the schedule change was in response to recommendations of a board of inquiry that looked into the causes for the failure of the Ariane 501 launch last year.

"This additional action, which does not call into question the design of the launcher nor its flight readiness, is intended to improve its robustness, increase the operational margins and allow for degraded operating modes," an ESA press release said.

In a joint statement a day after the ESA announcement, Phase 3D Project Leader and AMSAT-DL (Germany) President Karl Meinzer, DJ4ZC, and AMSAT-NA President Bill Tynan, W3XO, expressed continuing confidence that ESA and CNES (the French Space Agency managing the Ariane 5 program) will succeed in completing all the tasks necessary for a successful flight test of Ariane 502. "Naturally, we are disappointed that our launch will not be as soon as we had hoped," said Meinzer. "However, I am pleased that ESA and CNES are taking care to improve the operational margins for the Ariane 5 booster. This action helps give us renewed confidence in the overall probability for a successful launch of our satellite."

Tynan said a complete analysis had not yet been done but that he believed the delay would add "on the order of \$100,000" to Phase 3D's cost. That's on top of an estimated \$200,000 combined funding shortfall that AMSAT-NA and AMSAT-DL were reporting in late February. So far, AMSAT-DL has invested nearly \$1.6 million in Phase 3D, compared to nearly \$1.4 million for AMSAT-NA.

Phase 3D fund-raising efforts will continue. "Every month adds costs," Tynan concluded. "This shortfall can only increase now as a result of this latest schedule change." Both AMSAT leaders urged everyone to continue doing as much as possible to insure the needed funds will be in place for the completion and launch of Phase 3D in September.

Earlier this year, the Japanese AMSAT group, JAMSAT, helped bridge the funding gap by transferring \$50,000 to AMSAT-NA. The money represented excess donations from JAMSAT members for the Phase 3D SCOPE camera. The completed SCOPE camera, designed and built entirely by JAMSAT, has been installed and successfully powered up at the Phase 3D Integration Laboratory in Orlando, Florida, where preparation and testing continue.

Tynan emphasized that the Phase 3D team plans to take maximum advantage of the schedule change to perform additional testing. "It's not time being wasted," Tynan said, adding that the Phase 3D team "will use the delay to be even more sure about the spacecraft's readiness."

Prior to announcement of the latest delay, AMSAT-NA Vice President Keith Baker, KB1SF, had been reporting that AMSAT was racing to meet the early July launch schedule and that work on the satellite was moving along swiftly.

A series of pictures of Phase 3D work in progress is available via the AMSAT-NA Web site at <http://www.amsat.org>. Depending on its workload, the integration team hopes to be able to update these photos as work progresses.

ATV ROCKET LAUNCHES SET *(quoted from the ARRL Letter Vol 16, #13)*

The Aerospace States Association Rockets for Schools program has announced plans to launch three rockets during May that will carry Amateur TV (ATV) payloads. All launches will use 11-foot-long Super-Loki sounding rockets identical to the rocket used for the successful Wisconsin Rockets for Schools program launch in May 1996 described in "New Heights for ATV" (QST, Feb 1997).

On May 10, a Super-Loki rocket carrying an ATV payload on 439.25 MHz with GPS data on the audio is scheduled to be launched from Cape Henlopen State Park in Delaware. If successful, the event will mark Delaware's first suborbital rocket launch. The Aerospace Education Department and the Delaware AeroSpace Education Foundation are sponsoring the project in conjunction with the Aerospace States Association and several other supporting agencies. Teams of students in grades 7 through 12 are being recruited to assist in designing and building various payload components. For the latest information on the Delaware launch, see <http://www.dpi.state.de.us/dpi/launch/> on the Web or contact Sam Guccione, K3BY, e-mail sguccion@outland.dtcc.edu.

On May 17, two Super-Loki rockets carrying ATV payloads will be launched at separate times from Sheboygan, Wisconsin, on the shore of Lake Michigan (the site of the May 4, 1996, launch). Current plans call for the first to transmit ATV on 434.25 MHz with Morse code telemetry on the audio, and for the second to transmit ATV on 439.25 MHz with GPS data on the audio. For the latest information on the Wisconsin launches, see <http://phy.mtu.edu/rocket/> on the Web or contact Greg Heinen, KB9OBV, at heineng@orbitec.com, or Bryan Suits, WB8WKN, at suits@mtu.edu.

The Super-Loki rocket, which uses solid propellant, can carry the payload to altitudes of more than 30 miles.--
Bryan Suits, WB8WKN

"ROCKOON" LAUNCH FOILED BY RFI *(quoted from the ARRL Letter Vol 16, #13)*

Bill Brown, WB8ELK, reports that an RFI problem led to scrubbing the planned North Carolina launch from a balloon of an amateur rocket carrying ATV and APRS systems on March 22 (see "'Rockoon' Bearing ATV to Launch March 22," The ARRL Letter, Vol 16, No 12). The group of space enthusiasts, which includes several hams, has rescheduled the launch of the "rockoon"--a rocket launched from a high-altitude balloon--for late April.

"We were all ready to launch the rockoon system when--just three minutes before liftoff--we heard three loud pops from the rocket gondola," reports Brown, the group's "balloonmeister." "It turned out to be the cutdown squibs." Brown said the cutdown squibs were intended to fire after seven hours to let the rocket gondola and balloon descend--in case uplink commands failed--so that the balloon would not fly unattended at night. But RFI caused the timer to go off after just a few minutes, causing the malfunction.

The Huntsville Alabama L5 Society (HAL5)--a chapter of the National Space Society (NSS)--has spent the past two years developing and testing components for the rockoon. The HAL5 program is called Project HALO, for High Altitude Lift-Off.

Brown said that while the rockoon launch did not go forward, the group did take the 434-MHz ATV transmitter (with live TV camera views) off the rocket gondola and flew it to 55,000 feet attached to a small weather balloon. "Hams across North Carolina were treated to spectacular views of the Carolina coast sent down from the payload," he said. Unfortunately, the payload parachuted down just two miles west of Wilmington, North Carolina, and landed in a swampy area just north of an industrial park, where the crew was unable to recover it. Joked Brown: "The alligators probably have eaten it by now!"

A new launch date has not yet been set. For more details check the HALO Web site at <http://iquest.com/~hal5/HALO/SL-1/> or e-mail hal5@iquest.com.

NEW, IMPROVED TRANSCEIVERS ON THE HORIZON *(quoted from the ARRL Letter Vol 16, #13)*

ICOM has announced the IC-706MkII, with several improvements and additions to the popular tiny HF/VHF transceiver at the same price as the original IC-706. The MkII will offer slots for two optional filters, a "sub" dial (to tune the second VFO or for RIT), 20 W output on 2 meters, a separate band-change key, crossband split, band-stacking register, and better sensitivity outside the ham bands. The MkII should be available in May, according to ICOM. No retrofits are possible for existing IC-706s.

Ten-Tec has announced the OMNI-VI Plus, an upgraded version of its popular HF transceiver. The OMNI-VI Plus includes DSP noise reduction, low pass, auto notch and adjustable CW offset (with tracking sidetone) plus another filter position. A retrofit program is available for current OMNI-VI owners. The OMNI-VI Plus is priced at \$2585.

Yaesu proudly introduces the new FT-920 HF All-Mode Transceiver. The FT-920 is a competition grade HF / 6-Meter transceiver for cutting edge technology that separates Yaesu, the world leader in amateur radio from the rest of the pack.

The FT-920 includes High Performance 33 MIPS* Digital Signal Processing (DSP), for razor-sharp selectivity, increased average power output, and voice pattern contour choices; automatic seeking DSP Notch filter and Noise Reduction.

Additional features include a high-speed antenna tuner for RX and TX; user-friendly DSP Bandwidth controls for enhanced interference reduction and exclusive Shuttle Jog tuning controls for fine or rapid tuning. The new FT-920 will be released early May 1997. It's expected to retail for under \$2000.

Features

HF + 50 MHz with 100 Watts Output on all Bands

High Performance 33 MIPS* Digital Signal Processing (DSP) in all Modes with one touch control

New Design MOSFET PA Finals

Built-in High Speed Auto Antenna Tuner including 50 MHz (Antenna Tuner works on both RX & TX)

Auto Notch/Noise Reduction Control

Omni-Glow Dual Display with Twin VFO Knobs

Simplified Tuning with Shuttle Jog Control

Digital Voice Memory System

Separate FET RF Amplifier for High & Low Bands

Quick Memory Bank (QMB) Instant Frequency Memory System

High Resolution DDS Tuning

Built-in Electronic Keyer (Message Memory Keyer)

Built-in RS-232C Level Converter

And more !

* Million Instructions Per Second

PRESIDENT'S CORNER

It's April already and so many things have happened, boy are we having fun! We are presently working on a swapmeet problem that surfaced in February, we provided great support to the O5 fire, Ray is still hard at work on the Emergency Comm Van, we are trying to make a contact with STS-83 even though the mission was shortened by a faulty fuel cell and the Field Day preparation is underway. We are barely into the fourth month and we have had so many things to work out.

We have just had the March swapmeet and from all we can determine we did a good job of elevating the problems that were mentioned the month before. Rich Sauer called some managers in those buildings to get feedback and if there were any problems, there were none (so far). The managers that he talked with said they thought that the swapmeet went very well and employees were treated very well. Hopefully that will put our TRW / swapmeet interface problems to bed for a long while. We do still want to keep aware of the TRW employees that have to work on those Saturdays. Rich Sauer, N6CIZ has done a great job in turning around the managers' feeling toward the swapmeet, he deserves all our thanks for taking on the swapmeet managers' job, keep it up Rich.

On the latest emergency event that we had, we did a great job! We had 21 Emergency Communications Team volunteers that responded to the call for amateur radio operators. We got called late but we jumped in and helped with traffic control, maintaining surveillance of the TRW building that was evacuated, and feeding information to the security control center. The team was out there working for about two and a half hours, providing service to TRW and its employees. Our performance during the fire is a clear testimony of the TRW Amateur Radio Club's commitment to serving TRW in emergencies with its Emergency Communications Team. To all the members on the team, JOB WELL DONE!

The members that attended the first Field Day meeting were given a treat in that they were able to see the Emergency Communications Van and all the work that Ray, KD6IGI has put into getting it all set up to roll when the need arises. Also it was at the TRW Amateur Radio Clubs Swapmeet for people to view the club's commitment to providing a first rate emergency communication capability. The electrical interconnections inside the van are almost complete, it even has air conditioning. It is a very comfortable unit to work out of, again the club should be proud of our emergency communication capability.

Last but not least we are starting to gear up for our Field Day effort in June. We will be again at Friendship Park overlooking the LA harbor. This year we have John Shepherd, KO6MZ back to being a co-chairman with Ray Enriquez, KD6IGI, and it looks like we are going to have a serious effort, not like the jokers we had last year. The Field Day effort is in good hands, thanks guys!

One last thing, I would like to thank the usual users of the 145.32 repeater for allowing a clear channel during our emergency over at O5. We needed the repeater and the going home traffic that usually uses the repeater during that time cooperated with us and allowed us to help the company during the emergency. You all deserve a big thank you for standing by and for offering to make calls for Emergency Communications Team members so they could inform their home QTH that they would be late. It is really good to be part of the HAM community.

73, Bob Briggs KD6WYQ

The Inland Empire Council of Amateur Radio Organizations Presents The



ARRL SOUTHWESTERN DIVISION CONVENTION



This year's theme, *Hi Tech - Hi Touch* explores Ham Radio's role in the exploding technologies involved in the information revolution.

HAMCON '97 THE WEEKEND OF SEPTEMBER 12, 13, & 14, 1997

GRAND BANQUET SPEAKER: Astronaut **Dr. Ron Sega**, KC5ETH, Colonel in the United States Air Force Reserves. Dr. Sega left NASA on July 1, 1996 to become Dean of the College of Engineering and Applied Science at the University of Colorado at Colorado Springs, Co.

Colonel Sega was a Mission Specialist on shuttle mission STS-60, launched on February 3, 1994, the first joint U.S./Russian Space Shuttle Mission. From November 1994 to March 1995 he was the NASA Director of Operations, at the Gagarian Cosmonaut Training Center in Star City, Russia. He was also a Mission Specialist on Atlantis shuttle mission STS-76, launched on March 22, 1996, the third docking mission to the Russian space station Mir. Among other things, this shuttle mission included transporting the first U.S. woman astronaut to spend time on board the Mir, Dr. Shannon Lucid. KC5ETH was the Payload Commander for this mission and lead astronaut on Biorack, a small multipurpose laboratory located in the space lab module used for technology development, fundamental research into plant and animal cellular function, and environment characterization.

DX BREAKFAST: **Dr. Vince Thompson**, M.D., K5VT, will host the DX breakfast on Sunday morning. K5VT is well known for his DX activities in the ham radio community. He put on a fascinating program at last year's ARRL Convention held in Arizona covering his DXpedition to Benin, TY5A.

ADDITIONAL HIGHLIGHTS: **Dave Bell**, W6AQ, as Master of Ceremonies at the Grand Banquet ~ Featured Speakers ~ ARRL Conferences ~ Ladies Programs ~ **VE TESTING** ~ Prizes Galore ~ **YOUTH ACTIVITIES** ~ Swap Meet and T-Hunt on Sunday ~ **WOUFF HONG** ~ **EXHIBITS**, all of the major manufacturers and distributors ~ and much, much more.

For details and information contact Joe Magaditsch, KO6XB, Sect - Treas, IECARO at:

TELEPHONE: 909-685-7441 OR WRITE: IECARO
FAX: 909-360-3484 9244 Big Meadow Rd.
Pedley, Ca. 92509-4972

E-Mail <http://www.ham-radio.com/hamcon/>

TALK- IN FREQUENCIES: Two Meters, 146.880 (-) PL 146.2 (Local)
146.850 (-) (Wide area)
1.25 Meters, 224.340 (-) PL 156.7 and UHF 448.075 (-) PL 156.7 (Wide area)

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HAMCON '97 ARRL SOUTHWESTERN DIVISION CONVENTION



THE RIVERSIDE CONVENTION CENTER AND HOLIDAY INN, ONE BLOCK NORTH OF THE HISTORIC MISSION INN, 5TH STREET BETWEEN MARKET AND ORANGE, DOWNTOWN RIVERSIDE ~ SEPTEMBER, 12, 13, 14, 1997

HOTEL INFORMATION: (Prices do not include state tax or Riverside city room/bed taxes.)
Be sure to make your reservations as early as possible (space is limited), and mention you are with the American Radio Relay League to get the special convention rates.

HOLIDAY INN 3400 Market Street, Riverside, California 92501
\$ 62.00 Single / Double, \$ 72.00 Triple / Quadruple Occupancy
For reservations call: (909) 784-8000

MISSION INN 3649 Seventh Street, Riverside, California 92501
\$ 69.00 Single / Double Occupancy. \$ 15.00 for additional except children under 18 years stay free with adults.
For reservations call: (800) 843-7755 or (909) 784-0300 ext. 850

COURTYARD MARRIOTT 1510 University Ave., Riverside, California 92507
\$ 59.00 Single / Double, \$ 69.00 Triple / Quadruple Occupancy
For reservations call: (800) 321-2211 or (909) 276-1200

HAMPTON INN 1590 University Ave., Riverside, California 92501
\$ 57.00 Single / Double Occupancy
For reservations call: (800) 426 7866 or (909) 683-6000

RANCHO JURUPA R.V. PARK 4600 Crestmore Road, Riverside, California 92519 (CENTRALLY LOCATED)
\$ 16.00 per day for two people, \$ 1.00 each additional up to six per site.
For reservations call: (800) 234-PARK or (909) 684-7032 for more information.

Return the form below to: Joe Magaditsch, KO6XB ~ 9244 Big Meadow Road
Pedley, California 92509-4972 ~ FREE LOGO PIN WITH EARLY REGISTRATION!

-----Fill in, Cut off and return this form -----

Name _____ Call _____

Mailing Address _____

City _____ State _____ Zip _____

Additional Guest _____ Call _____

	QUANTITY	TOTAL
EARLY BIRD REGISTRATION [by May31, 1997]	_____ @ \$ 10.00	\$ _____
PRE-REGISTRATION (from 5-31 to 8-31, 1997)	_____ @ \$ 12.00	\$ _____
GENERAL REGISTRATION (after 8-31-97, 1997)	_____ @ \$ 15.00	\$ _____
BANQUET (Limit 500)	_____ @ \$ 25.00	\$ _____
LADIES LUNCHEON	_____ @ \$ 15.00	\$ _____
SUNDAY DX BREAKFAST	_____ @ \$ 15.00	\$ _____
Make checks payable to IECARO, and please do not put more than two people on one form. TOTAL		\$ _____

FCC issues changes in Amateur Radio rules

From ARRL Headquarters
Newington CT April 2, 1997
To all radio amateurs

In response to three petitions for rulemaking, the FCC has adopted changes to the Amateur Service rules that--among other changes--will make it easier to obtain 1x1 call signs for special event stations and harder to get a club station license. Other amendments to the rules included in a Report and Order released April 1, 1997, will allow hams to append special designators either before or after their call signs--or both, and will recognize, but not require, the use of a session manager at Volunteer Examiner testing sessions.

The FCC declined to give examination credit for formerly held licenses, and turned down an ARRL request for a lifetime operator's license.

Under the new amendments, the FCC will allow a licensee to substitute a self-selected call sign from the block of 1x1 call signs for temporary use during a special event operation. The station must announce its regularly assigned call sign at least once an hour. The special event call signs will be coordinated and issued by outside volunteer entities, not by the FCC. The Commission will announce later when and how volunteer entities may volunteer their services. The chief of the Wireless Telecommunications Bureau then would certify volunteer entities to serve as amateur station special event call sign coordinators, who would issue 1x1 calls from a common, online special event call sign database. By definition, a 1x1 call sign consists of a single prefix letter, K, N or W; the region number, 0 to 9; and a single suffix letter, A to W, Y and Z--750 call signs in all. The FCC turned down a suggestion that would have limited special event call signs to stations licensed to Amateur Extra class operators.

In proposing to increase the eligibility requirements for a club station license, the FCC said it was "important to determine that the applicant for a club station license is a legitimate radio club and not just a person seeking to acquire additional call signs." Under the rules changes, the FCC has raised the eligibility requirement from at least two members to a minimum of four. Applicants for a club station license must have a club name, a document of organization, management, and a primary ham radio purpose that's consistent with FCC rules.

Responding to a petition by the National Conference of Volunteer-Examiner Coordinators (NCVEC), the FCC said VECs could elect to designate a session manager if they wanted to, but they would not be required to do so. The Commission's new rules recognize the VE session manager function but emphasize that the three Volunteer Examiners at a test session would still be held "jointly and severally responsible for the proper conduct of each examination administered."

Another change will allow hams to include a self-assigned indicator before, after or both before and after the assigned call sign when identifying. Current rules only permit using such indicators after the station's regular call sign. Self-assigned indicators include those used to indicate location or type of operation, such as /KP2 when operating in the US Virgin Islands or /m when operating in a vehicle. They also can denote participation in an unusual event or other atypical station operation, according to the FCC.

Citing mostly negative comments, the FCC decided against allowing exam credit for formerly held amateur operator licenses. The Commission also said "no" to the ARRL's suggestion that the operator license be valid for the lifetime of the holder. The FCC said operators would still have to renew their station licenses every ten years and that it did not want to maintain a separate database to keep track of station license expirations.

The FCC announced all of the rules changes in a Report and Order, FCC 97-99, adopted March 20 and issued April 1. The amendments become effective 30 days after the Report and Order is published in The Federal Register.

TRW AMATEUR RADIO CLUB

ELECTED OFFICERS

President	Bob Briggs	KD6WYQ	R8 / 2188	(310) 813-2622
Vice President	Pat Anderson	KB6YPI	R7A /1265	(310) 813-6874
Secretary	Nina Whiddon	KN6FL	O1 / 2070	(310) 813-9351
Treasurer	Jan Parker	KD6AKD	R4 / 2058	(310) 812-1081

APPOINTED STAFF

Activities Chairperson	Greg Martens	N6RRY	M1 / 1275	(310) 813-4049
Crosstalk Editor	Duane Park	WA6EIK	M3 / 2261BO	(310) 813-4219
Emergency Coordinator	Duane Park	WA6EIK	M3 / 2261BO	(310) 813-4219
Librarian/Asst. Postmaster	Steve Papa	KO6VF	M5 / 1263	(310) 812-5305
Membership Chairperson	Jerry Dean	WA6GVO	R2 / 1036	(310) 812-0770
Past President	Frank Cartier	W6FC	O1 / 1210	(310) 812-2292
QSL Manager	Bryan DeAro	KN6OW	120 / 1020B	(310) 812-4789
447 Repeater Autopatch	Pat Anderson	KB6YPI	R7A /1265	(310) 813-6874
SEA Representative	Elizabeth Twyford	KS4IS	D1 / 1024	(310) 813-0524
Swap Meet Manager	Rich Sauer	N6CIZ	R9 / 2849	(310) 813-5869
SYSOP (Telephone BBS)	Ron Hoffman	KE6OJD	M4 / 2031C	(310) 814-9126
Technical Chairperson	John Cheatham	KE6OJM	R9 / 2838	(310) 813-5903
S.P. Packet/Internet Sysop	Chris Wachs	WA2KDL	R7A / 2100	(310) 813-1506
Training Chairperson	Bryan DeAro	KN6OW	120 / 1020B	(310) 812-4789
Trustee of W6TRW License	Frank Cartier	W6FC	O1 /1210	(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

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