



SCCARA-GRAM

W6UUVOLUME 5

NUMBER 4....W6UW

SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION

***ORGANIZED IN 1921

SAN JOSE, CALIFORNIA***



MOST DETAILS OF THE CONVENTION ARE WORKED OUT-BE SURE TO SET ASIDE OCTOBER 3,4 & 5 1986 TO ATTEND AT THE LE BARON HOTEL, HERE IN SAN JOSE.... ACCEPTING REGISTRATIONS NOW!!!

FROM THE PREZ

Being the "Prez" has its good days and bad days...you might say a bag of mixed blessings. You're really in the fast lane, life is exciting, your phone is busy, you're pretty much informed...because in effect you are the focal point of the membership, not quite a one person complaint department, but certainly an information bureau. That's fine and it should be. Several points emerge from all of this wool gathering...first that SCCARA'S housing needs are not being met adequately with the present arrangement at Red Cross. Part of this is our problem in not anticipating the audience growth we've had in both meetings and classes, against the competition of Red Cross sponsored activities when we try for more room. Red Cross has tried, but crawling over those bales of blankets in the room allocated to us is getting old. And, it would have been nice to have a pot-luck dinner, but the half auditorium scheduled just wouldn't do. But we'll keep trying. Talking about classes, the main needs not satisfied are the Theory for both Technician and General Classes. We have lucked out with an offer from new member WB6NLA, Bertram Sacks, to instruct. Additional class space at Red Cross is not available. But, just perhaps something might be worked out with the 13 WPM Code Class to combine a little theory. This will be discussed at the April 14th SCCARA meeting. V.P. Art Furtado, KG6PY has obtained permission from his new boss, Frank Qument to hold our annual SCCARA FLEA MARKET in the store parking lot on June 1st. Now is the time to start cleaning out your "shack". Bill Stevens, W6ZM did and that's going to be his donation to the Computer Fund (more later). SCCARA itself will have a booth to market such goodies. Larger items will be sold on consignment. Anyhow, start those heart-rending decisions to part with that unneeded stuff now. And talking of Repeater Fund Donations, do you remember the offers made by Wally, KA6YMD and Ed, KB6DLB, waving those green 20's? Ernie ZumBrunnen, WB6UOM did and there's a need for a lot more now that the membership has approved a 440 repeater. By the way, the frequencies of the 440 low level pair allocated to W6UW are 442.425 MHz out/ 447.425 MHz in. See you at the meeting, April 14th.
de Ed, WD6CHD, President

NOTE !!
APRIL POT-LUCK
CALLED OFF !!



JOIN US 4
HAVE COFFEE &
COOKIES !!

REGULAR MEETING

MINUTES OF MARCH 10th, CLUB MEETING.

The meeting was held at the Red Cross Bldg, room assigned for the club. Was called to order by our President Ed Rawlinson WD6CHD at 7:30 P. M. Sharp.

GUEST FROM FINLAND

Ed introduced our guest Tapani Nisula OH5BM. Mr Nisula gave us his version of the antennas used in his country. I guess they are comparable with ours the Super-DX antenna, five element beams for 20,15 and 10 meters stacked on an 80-foot self-supporting crank-up tower, except price.

AMTOR EXPLAINED BY HARRY WIJTMAN, AE6M.

Frans Beelard Jr, KA6YMB, was introduced by Harry. Harry gave us a good explanation of how AMTOR (Amateur Teleprinting over Radio) works, this system is much better than RTTY because AMTOR'S benefit is its error detention and correction properties.

There are two AMTOR modes: Mode A called Automatic Repeat Request (ARQ). Mode B is called Forward Error Correction (FEC). In Mode A they are constantly confirming each other's transmission. The Mode B is a broadcast mode it sends each character twice. The first character sent is stored in the memory as it is received. Now when the second character is received, the character pair is checked if there are any errors.

To establish contact you have to get on a calling frequency and make a general call on Mode B. When you establish contact switch to Mode A for the communication.

FIELD DAY MOTION BY ART FURTADO, KG6PY.

These are his words "Shall we for Field Day go to Mt. Madonna or not".

Membership's vote approved Mt. Madonna.

DAN G. DIETZ, WM6M TREASURER'S REPORT.

Beginning balance.....	\$1252.36
Deposits.....	00.00
Disbursements.....	202.76
Ending balance.....	\$1049.54

Convention account.....	\$1002.35
San Francisco Federal.....	804.09

MEMBERSHIP TO DATE. 250

ATTENDANCE TODAY. 66

Jose "Joe" Bocanegra

..... THE EQUIPMENT COLUMN by ERIC, KB6LCR

I am now tuning through the 2-meter band using "temporary kt" on the end of my call. If you hear me please say Hi. Now I want someone to write in and tell me which 440 rig I should buy. I want to be ready when the clubs 440 repeater gets on the air. I am also interested in 6-meters and SSB in the VHF bands. Any information in these areas would be appreciated by us new Tech and General Class operators. There are also quite a few new members in the Novice class (Wed. nights) who would like to know which radios are good and especially which ones to stay away from.

Jim, KB6HMR wrote in to tell the future Novices that they should watch the Ham flea markets closely for good deals. He states that he picked up a Heathkit 10-80 meter rig for \$200. He is very satisfied with it and has made many contacts as a Novice.

Dan, WM6M had some problems with his Morse University code machine and also with his Kenwood TS-180S. We'll get more details on this next month.

I recently bought an Icom 27H, 2-meter mobile radio. I would recommend this radio to anyone. It is suprisingly small and well built. It has 10 easy to program memories to store frequency, offset and PL. It has all of the features needed in a mobile rig. I also have an Icom IC-211, 2-meter all mode base, it has some problems. The frequency does not always change when you turn the dial and the display sometimes dims or loses characters. I have heard that this is a common problem. Can anyone tell me the solution?

I hope everyone has time to write and tell us there equipment experiences, good or bad. The address is : Equipment Column, P.O. Box 360640 Milpitas, Ca. 95035.

73's
Eric Homa
KB6LCR/KT



"My name is 'Bop'...That's 'B' as in brestosaurus,
'O' as in ornithischian and 'P' as in pterodactyl."

FOR SALE & WANT

Rules are that only SCCARA Club members in good standing may use this service. Only items directly involved with Ham Radio may be submitted. A suggested price must be stated. All items will run for one issue only, unless resubmitted. Both name and phone number to be included.

FOR SALE

Can be purchased as a package, or will break up as required:

KENWOOD TS-830S, transciever, W/CW filters...\$ 650.00
SP-230, matching speaker, W/filters. 45.00
VFO-240, matching VFO..... 100.00
(CW filters, 500 HZ) * 795.00

OR

as a complete package, with hand mike * 675.00

All original boxes and manuals for each item, will demo to interested hams. See any current QST or CQ for details and current new prices.

Offered by Dick Letrich, WB6WKM.....(408)264-0965

WANTED

Ben Kuckens, N6NIS is looking for a tower and HF 3 band beam(10-15-20) along with a rotor if possible. He would like a 40 to 50 foot tower. He can be located at this number (408)866-4321 in Los Gatos.



ARRL VEC AFFILIATED AMATEUR LICENSE EXAMINATIONS

Saturday April 19, 1986
Tandem Computers Cafeteria
19333 Vallco Parkway
Cupertino, Calif. *4.25...Walkin Only Starts at 900AM
until 1100AM
.....

Sunday June 1, 1986
Seventh-Day Adventist Church
San Tomas Expressway & Campbell Ave.
Campbell, Calif. *4.25....Walkin Only Starts at 100PM
until 300PM

For details contact Shorty, AE6Z (408)243-8349
For other ARRL Pacific Div. Tests, call the HOT LINE
(408)984-8353

ARRL PACIFIC DIVISION CONVENTION OCTOBER 3,4 & 5 at the
LE BARON. For info write SCCARA, PO BOX 6, SAN JOSE 95103

TTY DATA	Loop Cur.	Paper Tape	Digital State	TTL Volts	RS232 Volts	ML188 Volts	AMTOR State
Mark	On	Hole	1	>+3.5	<-5.0	+6.0	B
Space	Off	No Hole	0	<+0.7	>+5.0	-6.0	Y

Table 1 - Comparison of various RTTY signal standards.

Audio Tone Frequencies (Hz)

TTY Data	High Tones	Low Tones	Marine Tones	"103 Modem" (Orig)	"ANSWER" (ANSWER)	"202 Modem" (HDX)
Mark	2125	1275	1615	1270	2225	1200
SPACE	2295	1445	1785	1070	2025	2200

Table 2 - Common RTTY demodulator tone frequencies.

Signal Polarity.

Teleprinters operate with signals that may have only two conditions, ON or OFF, a "binary digital" code. In early land-line teleprinter systems the two states were represented by current flow in the signal wire. The signal line was called the "RTTY loop", so the "ON" current is called the "Loop Current". Because of early strip-pen recorders used for landline telegraph, the current-on condition is called the "MARK" condition; the current-off condition is called "SPACE". Thus the terms MARK, SPACE, and LOOP all date back to early land-line telegraph and teleprinter systems. In modern computer terms we would more likely call the mark state a logical "1" and the space state a logical "0". This signal polarity is further confused by various other commercial standards. Some of these standards are shown in Table 1.

When audio tones are used in radio and telephone line circuits, the representation of mark and space states is expanded as shown in table 2. Other tones, frequency shifts and reverse polarity may also be used by commercial RTTY stations.

Data Codes.

RTTY is sent on a wire-line or radio circuit by using a combination of these mark-space pulses. A single pulse can represent two states - either "ON" or "OFF" (mark or space). To send all 26 letters, 10 numbers, and some control and punctuation symbols, we need just more than one pulse or "BIT". The number of binary bits required to send a character varies with the code used. If two bits are used, a total of 4 combinations exist; 8 combinations for 3 bits, 16 for 4 bits and 32 for 5 bits. The number of combinations or states available increases by a multiple of two for each bit added to a binary code. Each bit is independent of the other and represents either an on or off state. Therefore, the possible combinations for each on or off state rise exponentially with the number of bits. This usually is diagrammed in a truth table. On and off are two possible states, Adding two bits equals 2*2, or 4 combinations, and adding 3 bits equals 2*2*2, or 8 combinations, and so on.---to be continued---

I wonder how many of you make it a point to try and listen to the Ham Radio weekly news series "Westlink"? For those of you who do not know about it, its sort of a weekly on the air update of Ham happenings. Many local 2 meter clubs play it on the air as part of their 2 meter nets. WA6OQS, 146.760 plays it monday night about 9:00 local. The Northern California DX Club runs theirs at the end of the net about 8:00 PM Thursday nights. I'm sure that there are others, but the above mentioned times will give you at least two different days and times, so if you miss it on Monday, you have a shot at picking it up on Thursday night. Try it a few times, its very well done and will help to keep you abreast of the latest in the Ham world. Thursday night, March 20th found me in a hotel room in Sacramento listening to the NCDXC meeting on the air, which is relayed via a link so that it covers quite a bit of the Sacramento Valley. From the Westlink Report, I heard the shocking news that the FCC had stepped in and issued citations to hams in the South East, that were part of an on the air swap shop. Now I don't know all of the details, but what a shock! This of course could have repercussions that could affect all of the Ham World! It could mean that we could be cited if one of us mentions on the air that we have a "such & such" for sale at \$2.00!! While the outcome has yet to be determined, I feel that this is a breach of our CIVIL RIGHTS. The regulations are very specific in that we can not sell for business or profit on the air, but we should be able to SWAP or SELL any Ham related items that we personally own. So again the FCC has dropped a bombshell on Ham Radio- the outcome is sure to be long in coming, and only then after much heated debating and waste of Tax payers money. So for now we have to play it safe and refrain from using our on the air swap nets for passing prices, but let me assure you that you havn't heard the end of this from me! I will try and keep you abreast of all the latest on this important subject, that directly violates our rights to non-business use of the Amateur bands. I guess that the timing of this new intrusion by the FCC comes at a bad time for me. I just upgraded my station and bought a new rig, and was hoping to turn the other one into cash ASAP to ease the financial pain, by putting it on several on the air swap shops. You will find it listed in the Sell Swap section of the SCCARA-GRAM. This new job assignment, has really begun to eat into my personal time, by keeping me away from home alot, both nights and weekends. So your input in the way of articles becomes more important to me every month. If I am to keep this interesting we need lots of different points of view from you. All of this could not happen now, if it were not for several club members, led by our able President and those other members who assume so much of the work load. I plan to see ya at the next club meeting- so 73 for now..... Dick Letrich.



FROM YOUR TREASURER.....

Let's kick off this page by congratulating some club members for achievements: Roy Metzger, K6VIP passed his Extra and has the ear-to-ear grin to prove it! Also upgrading in March were Cathy Martens, KB6LCL to Technician; Lyman Crowell, N6JYS to General; Marvin Moye, N6MXR to General; Ben Kuckens, N6NIS to Advanced; Eric Homa, KB6LCR to Technician, Mike Hastings, KB6LCJ to Technician; Ron Saso, KB6LCQ to Technician, Burt Seymour, N6NGS (new call) to Technician; and, from our Novice class, Flor Canonizado who couldn't wait and passed his Novice...I hope I didn't forget anyone!

NEW MEMBERS....

We also have new members to welcome. They are: Karen deWeeger; Al Allen; Sam Bigham, KB6HKW (I listed Sam in last months column but I forgot his call...sorry, Sam!); Ethan Coburn; Bob Lang; Michael Bergman; Fred Smith (waiting for his call!); Andy Noble; Rick Grambsch, WA6TEM; George Server, Jr., KB6LUC; John Gray; Randy Hosmer, WA7KXN; Roland Kretschmann, N6LTN; Warren Benson, KB6JOB; Joseph Kennedy, WQ6Q; Joshua Lutus; Casey Nesbit; and Ernest Zum Brunnen, WB6UOM who has returned to SCCARA after a too long absence.

DX NEWS....

Marvin Moye, N6MXR is leaving for a one-year tour of duty courtesy of the U.S. Navy to a rather isolated and rare DX location...Diego Garcia. Marv expects to be signing "N6MXR/VQ9" by the end of April, and he plans on working a lot of CW to sharpen up for taking his Extra code test upon his return. I should say he'll get a lot of time to practice and won't go hungry for lack of stations wanting to contact him. Be watching for Marv on the bands...

REPEATER CHALLENGE....

A couple of welcome contributions to the repeater fund...thanks to Fred Wallin, KA6AYX and Ernie Zum Brunnen, WB6UOM. I am ordering the transmit/receive crystals for the 440 MHz repeater. I understand that the loaned repeater is in good shape and will take a minimum of preparation to get in on-the-air. It is to be linked with our 2-meter repeater. The frequencies for the new repeater...transmit on 442.425 and receive on 447.425 MHz.

APRIL MEETING....

I'm disappointed that we will not be able to hold our Potuck at the April meeting. It has always has been a popular event and lets the entire family enjoy an evening of ham radio and visiting. Maybe we can find a church or some social club that would permit the club to hold this event. I have an idea!!...at least I like! I respectfully submit that SCCARA hold a family picnic on some warm, sunny Saturday perhaps in July or August. Many people attend the eating contest at Field Day, but many don't care to venture that far out. How about a potluck picnic...maybe at Vasona Park or wherever is suitable, hospitable and available? What do you think of the idea? If we can't hold a indoor potluck somewhere, why not make it an annual outdoor picnic for the whole family and friends of SCCARA?

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CLASSES....

The 13 WPM and Novice classes are going strong...about half completed right now. We are very fortunate in having a real professional educator **FIND SCCARA!** Bert Sachs, WB6MLA has contacted SCCARA and volunteered to help with any and all amateur classes. I have many requests for holding an Element 3 class (Tech/Gen). Bert has agreed to brush up on this element and conduct this class as soon as we can sign up a group and locate a suitable and reliable classroom. If you are interested in this class, please give me a call or drop me a line. This is a great opportunity for you Novices to get help for your upgrade so let's hear from you!

CONVENTION....

This is starting to get really interesting. The news is getting out that SCCARA is holding a big convention and we have several exhibitors already signed. Our publicity is starting to roll. Look for a registration form in the next **SCCARAGRAM**. You can help your club by registering early...and you'll get extra tickets for the award drawings.

ARRL....

A reminder that if you are going to join or renew with the ARRL, please do it through SCCARA. We have about 58% league membership from our licensed club members but we can do better.

DUES....

If you have not paid your 1986 dues, you are in danger of being dropped from membership. We don't want to lose a single member so renew **TODAY!** Dues are \$10.00 for individuals and family memberships are \$15.00. Dues are due (huh?) on the first day of each year. Memberships are good thru the last day of each year. I got a few suggestions to state the dues amounts and conditions. If you have any questions, please call me.

I am printing a list of members from 1985 who **HAVE NOT PAID** their 1986 dues. If you find yourself on this list please respond with your check!

73,

Dan, WM6M..SCCARA Treasurer

Ball, Carl L.	N6HLY	Duffy, Richard J.	N6KFJ	Ogawa, Stuart	WB6YRW
Beedle, William	KF6KV	Duffy, Sally		Osborne, Mike	WA6VLY
Berner, Charlotte		Edwards, Joe		Parish, Vernon L.	WD6GYW
Berner, Perry	KA6YEV	Farris, Tom		Perkins, Donald	
Berner, Roy C.	KA6PZD	Fraher, John E.	KA6FRK	Pound, Al	KA6J
Boggs, Earl	KA6AOV	Gaetano, Al	W6VZT	Rickert, Edmund J.	KB6DKY
Brice, Theodore	WA6GKV	Gaelin, Jean "Doc"	W6ZRJ	Rishell, Anita	KB6ELW
Brody, Jerry	WA6VMO	Hale, Charles	K66A	Rishell, George	KB6ELV
Chan, Steve		Hall, Howard	N6BDN	Rogowski, Eric	N6LPU
Clark, John		Henderson-Gragg, Candace		Rose, Rick	
Clark, Ross A.		Herschhorn, John B.	WB6QXT	Russell, Jack	WA6IER
Coelho, Darold S.	N6EEZ	Hill, Eugene	N6ANE	Salozar, Antoinette	
		Kelly, Tim		Sefried, Harvey D.	KB6ABD
Colin, Charles B.	N6EJG	Madden, Michael		Stackhouse, Jack	
Crosswhite, John	KA6SHS	Magnaghetti, D.K.		Steele, Gus H.	KB6ABP
Day, James	K66QB	Miller, Eugene R.	KB6ABI	Stewart, Craig	KF6SD
Dethlefsen, James	KA6YRK	Moss, Dave	WD6CZY	Stone, Clifford	KA6RDT
Dethlefsen, Judith	KB6JLJ	Moss, Judy	N6FCS	Stroud, Gale	KB6JB0
Dexter, Paul	KC6D	Niemeyer, Gary	WA6FTP	Vansant, Mark	
Dorothy, Bob	K6YIB	O'Keefe, James	WE6V	Nijtman, Harry	AE6M
Dorsey, Daniel "Bob"	K4UVT	Ogawa, Stan	WB6YRT	Wilbanks, Ben	KA6R
				Wilbanks, Suzanne	KA6FFK

Chairman's Welcome

Welcome to the hams from all over the world who will be joining us in San Diego. We are making this "Early Bird" offer to get you to mark your calendar now for a great vacation in Southern California this fall! Walt Hicks, W6UZL, General Chairman

1986 ARRL NATIONAL CONVENTION!

SAN DIEGO

SEPTEMBER 5-7



HIGHLIGHTS

- ARRL, MARS, FCC Forums
- Technical Sessions
- Special Youth Activity
- Public Service Sessions
- VEC License Exams
- Banquet - W0RE & K6DUE
- Ladies Luncheon - W6NAZ
- Alternative Activities
- Old Town & Tijuana Tours
- New Products & Exhibits
- Freq & Deviation Clinic
- Antenna Gain Contest
- World Class "T" Hunt
- Spark Gap Radio Demo
- Hospitality Suites
- Hourly Prizes

YOUTH FORUM

Lead by W0RE, Astronaut Tony England. Experts will expose teenagers to the latest in ham radio "high tech" with hands-on demos.

DINNER DANCE CRUISE

Friday Evening - Romantic boat tour of San Diego bay, open bar, dinner, dancing.

CONVENTION SCHEDULE

Friday September 5

1500 Exhibits Open
1830 Dinner Dance Cruise
2100 Exhibits Close

Saturday September 6

0800 Special Interest Group Breakfasts
0900 Exhibits Open
0900 Tech Sessions & Forums Start
1130 Ladies Luncheon
1300 Old Town & Tijuana Shopping Tours
1300 W0RE Youth Forum
1600 ARRL FORUM
1700 Exhibits Close
1830 Social Hour
1930 Banquet
Midnight Wouff Hong

Sunday September 7

0800 Special Interest Group Breakfasts
0900 Exhibits Open
0900 Tech Sessions & Forums Start
1300 "T" Hunt Starts
1300 Convention Closes

FT-209RH



TR-2600A



EARLY BIRD PRIZES



YAESU AND KENWOOD

ARE DONATING TOP-OF-THE-LINE RADIOS

ADVANCE REGISTRATION PRIZES

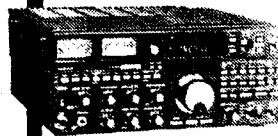


FT-2700

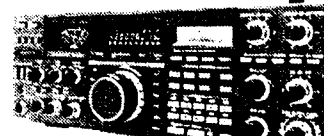


TR-2570

GRAND PRIZES



FT-980



TS-940S

ARRL 1986 NATIONAL CONVENTION

September 5, 6, & 7, 1986

REGISTRATION DATA FORM (Print or Type)

Name _____ Call _____
Street _____
City _____ State _____ ZIP _____

Make Badges As Follows:

Call _____ Name _____ City _____
Call _____ Name _____ City _____

Pick up Tickets and Badges at the Door.

To Reserve a Room at the Convention Site, Call T & C Hotel and ask for ARRL rates. Toll Free: California (800) 542-6082, USA (800) 854-2608
CONVENTION INFO: (619) 292-7918

MEETING SITE TOWN & COUNTRY CONVENTION CENTER SAN DIEGO, CALIFORNIA

How Many	Cost	Amount
_____ Advance Registrations	@ 7.00	_____
_____ Registration After 8/15/86	@ 10.00	_____
_____ Banquet (Prime Rib)	@ 25.00	_____
_____ Ladies Lunch (1st 100)	@ 10.00	_____
_____ Dinner Cruise (1st 100)	@ 33.00	_____
Total Enclosed \$		_____

18 Years & Under No Charge For Admission At Door

Postmark Before April 15, 1986 is Eligible For ALL PRIZES!!!!!! Mail With Check Payable To: SANDARC, P.O. Box 82642, San Diego, CA 92138

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Ed Rawlinson, WD6CHD, Mailman, / 264-2988

CLUB REPEATER....Input 146.985 MHZ-Output: 146.385 MHZ. On-the-air meetings Monday Nights 7:30PM Local time except on regular meeting nights.

REGULAR MEETINGS, are held the second Monday of each month. Meetings start at 7:30PM Local and are held at the RED CROSS Building, 333 McKendrie, San Jose, 292-6242 .

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