Field Day: last year's site at Centennial Park, June 24-25. This year's same.
**CLUB BOARD OF DIRECTORS**

President ........ Frank Smith .......... WA6VKZ .......... 730-7142
Vice President ... John Roberts .......... WA6LAB .......... 540-7368
Secretary .......... Bob Tegel ............ KD6XO .......... 531-0926
Treasurer .......... Mark Stanford .......... KJ6JC .......... 991-7398
Activities .......... Ken Konechy .......... W6HHC .......... 541-6249

Membership .......... Tom Thomas .......... WA6PFA .......... 771-2917
Public Relations ... Jim Talcott .......... N6JSV .......... 836-5595
T.V.I. Chairman ..... Bob Eckweiler .......... AF6C .......... 639-5074
Member at Large .... Ron Toering .......... KB6E2P .......... 971-5180
Member at Large .... Kei Yamachika .......... W6NGO .......... 538-8942

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**CLUB APPOINTMENTS**

Club Historian ....... Bob Evans .......... WB6IXN .......... 543-9111
W6ZE Trustee ......... Bob Eckweiler .......... AF6C .......... 639-5074
R.F. Editor (Act.) ... Mark Stanford .......... KJ6JC .......... 991-7398

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**CLUB FUNCTIONS**

**MONTHLY MEETING:**

3rd Friday of each month, 7:30PM at:

**MAY 19, 1989**
MERCUERY SAVINGS & LOAN, TUSTIN, CA.
1095 Irvine Blvd. (4th St. becomes Irvine)

**JUNE 16, 1989**
Talk-in on 146.55 MHz

(Take the 4th St. exit of the 55 FREEWAY
and head east. Continue about two blocks
past Newport Blvd. It's on the left.)

**JULY 21; 1989**

**CLUB BREAKFAST:**

1st. Saturday of each month, 8:00AM at:
DENNY'S RESTURANT
2314 E. 17TH Street
Santa Ana, CA. (714) 543-0872
(Second building west of the Newport (55) Freeway)

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**CLUB NETS**

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<thead>
<tr>
<th>BAND</th>
<th>MODE</th>
<th>DAY</th>
<th>LOCAL TIME</th>
<th>FREQ</th>
<th>MHZ</th>
<th>SPLIT</th>
<th>PL</th>
<th>OPERATOR</th>
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<tbody>
<tr>
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<td>FM</td>
<td>Wed</td>
<td>2100 hrs.</td>
<td>146.550</td>
<td>splx</td>
<td>na</td>
<td>W6HHC</td>
<td></td>
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<tr>
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<td>SSB</td>
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<td>na</td>
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(Listen for W6ZE, net control) *Plus or minus 5 MHz

**ARES DISTRICT NETS**

<table>
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<th>BAND</th>
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<th>DAY</th>
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<th>FREQ</th>
<th>MHZ</th>
<th>SPLIT</th>
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<td>splx</td>
<td>na</td>
<td>noted 3</td>
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1 - ARES Info net. 2 - ARES District 3 net starts after info net is completed (usually about 1915 hrs).
3 - City nets; Orange: 146.555, N6MF; Tustin: 146.505, WA6VKZ; Santa Ana: 147.585, W6HHC

[Page 2]
Field Day Rules

1) Eligibility: Field Day is open competitively to all amateurs in the ARRL/CRL Field Organization (plus Yukon and NWT). Foreign stations may be contacted for credit but are not eligible to compete.

2) Object: To work as many stations as possible on any or all amateur bands except 10 MHz, and, in doing so, to learn to operate in abnormal situations under less-than-optimum conditions. A premium is placed on skills and equipment developed to meet the challenge of being prepared to make contact and to acquaint the public with the capabilities of Amateur Radio.


4) Field Day Period: 1800 UTC Saturday (2:00 PM Saturday) until 1800 UTC Sunday. Class A and Class B stations may operate the entire 24 hours from June 24th to June 25th.

5) Entry Categories: Field Day entries are classified according to the maximum number of simultaneous transmitted signals, followed by the designation of the organization or individual participation. Below 30 MHz, a transmitter is used for a contact on a band, it must remain on that band for at least 15 minutes. During this 15-minute period, the transmitter is considered to be transmitting in the same direction, regardless of whether it is or not, for the purpose of determining transmitter class. Switching devices prohibited.

Class A: Club/portable: Club/portable entry is limited to three or more licensed amateurs and all contacts are made using a single transmitter only. Clubs/portable entries are limited to one club/portable entry per band. Contact methods are the same as for Class A.

Class B: One- or two-person portable: Nonclub/portable stations set up and operated by not more than two licensed amateurs will be placed in Class B. Other provisions are the same as for Class A. One- or two-person Class B stations may operate on any band at any time, except for the ASV/AMTOR band where they are limited to one station per band.

Class C: Home stations: Stations operating on temporary or permanent station locations using commercial power. Class C stations may operate on any band at any time, except for the ASV/AMTOR band where they are limited to one station per band.

6) Exchange: Stations in any ARRL/CRL Section will exchange their Field Day operating class and ARRL/CRL Section. For example, if your club was planning to operate in the three-transmitter category from Missouri, you would send a Missouri Field Day operating class and QTH.

7) Miscellaneous:

A) Operators participating in Field Day may not, from any other station, contact for point credit or other purposes stations which are operating on the same band or frequency at the same time. Field Day participants may not operate on any band during the Field Day period.

B) Each phone and each CW segment is considered a separate band. All voice communications are considered to be separate bands. Phone contacts count one point each, and CW contacts count two points each. Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

C) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

D) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

E) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

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H) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

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O) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

P) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

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R) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

S) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

T) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

U) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

V) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

W) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

X) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

Y) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

Z) Power multipliers are assigned to stations making contact on more than one transmitter at the same time. The highest power used is the maximum power used, except for the ASV/AMTOR band where the minimum power used is the minimum power used.

WIAR Field Day Bulletin Schedule

In addition to the regular schedule detailed on page 50 of April QST, the following stations will be on the air for at least 30 minutes during the Field Day period:

[Schedule details not visible]
Evidence must be submitted in the form of a newspaper clipping, a memo from a BC/TV station stating that publicity was given or a copy of the material that was sent to the news media for publicity purposes.

B) 100 points for physically locating in a public place (eg shopping center, parks, etc) with significant access by the public. The intent here is for Amateur Radio to be on display to the public.

C) Additional 100 points can be earned by such display stations in public places actively conducting an information booth for the visiting public and dispensing information handouts, maintaining visitor's logs, etc., as an information/recruiting tool for Amateur Radio. Evidence submitted for both (B) and (C) may consist of copies of handouts, visitor's log, brief report on activities conducted, photos, etc.

3) Message origination: 100 points for origination of a message by the club president or other Field Day leader, addressed to the SM or SEC, stating the club name (or nonclub group), number of operators, field location and number of ARES members participating. The message must be transmitted during the Field Day period, and a fully serviced copy of it must be in standard ARRL message form or no credit will be given.

4) Message relay: 10 points for each message received and relayed during the Field Day period, up to a maximum of 100 points. Copies of each message, properly serviced, must be included with the Field Day report.

5) Satellite QSO: 100 points can be earned by completing at least one QSO via satellite during the Field Day period. The repeater provision of Rule 7C is waived for satellite QSOs. A satellite station does not count as an additional transmitter. On the summary sheet, show satellite QSOs as a separate "band."

6) Natural Power: Field Day groups making a minimum of five QSOs without using power from commercial mains or petroleum derivatives can earn 100 points. Intuitively, this means an "alternate" energy source of power such as solar, wind, methane or grain alcohol. This includes batteries charged by natural means (not dry cells). The natural-power station counts as an additional transmitter. If you do not wish to change your entry class, take one of your other transmitters off the air while making the natural-power QSOs. A separate list of natural-power QSOs should be enclosed with your entry.

7) W1AW message: A bonus of 100 points will be earned by copying a special ARRL Field Day bulletin sent over W1AW on its regularly announced frequencies just before and during Field Day. This message can be received, directly from W1AW or by any relay method. An accurate copy of the received message should be included in your Field Day report.

8) Packet radio: 100 points can be earned by completing at least one QSO on packet radio during the Field Day period. The repeater provision of Rule 7C is waived for packet-radio QSOs. A packet station does not count as an additional transmitter. On the summary sheet, show packet radio QSOs as a separate "band."

9) Reporting: Entries must be postmarked by July 25, 1989. No late entries can be accepted. A complete entry consists of an official ARRL summary sheet (or reasonable facsimile) and a list of stations worked on each band/mode during Field Day, plus any bonus proof. The list of stations worked on each band or mode may take the form of official ARRL dupe sheets or an alphanumeric listing of call signs worked per band and mode. This list may be computer-generated. Incomplete or illegible entries will be classified as checksheets. A copy of Field Day logs should be kept by your Field Day group but should not be sent in unless specifically requested later by ARRL.

10) Condition of Entry: Each entrant agrees to be bound by the provisions, as well as the intent, of this announcement, the regulations of his or her licensing authority and the decisions of the ARRL Awards Committee.

### Resonant Frequency Formulas
\[
f = \frac{1}{2 \pi \sqrt{LC}} = \frac{159.2^*}{\sqrt{LC}} \\
L = \frac{1}{4 \pi^2 f^2 C} = \frac{25,330^*}{f^2 C} \\
C = \frac{1}{4 \pi^2 f^2 L} = \frac{25,330^*}{f^2 L}
\]
*in these formulas f is in kc and L and C are in microunits.

### Impedance Formulas
\[
Z = \sqrt{R^2 + (X_L - X_C)^2} \text{ (for series circuit)} \\
Z = \frac{RX}{\sqrt{R^2 + X^2}} \text{ (for } R \text{ and } X \text{ in Parallel)}
\]

### Decibel Formulas
When impedances are equal,
\[
dB = 10 \log \frac{P_1}{P_2} = 20 \log \frac{E_1}{E_2} \\
= 20 \log \frac{l_1}{l_2}
\]
When impedances are unequal,
\[
dB = 10 \log \frac{P_1}{P_2} = 20 \log \frac{E_1 \sqrt{Z_2}}{E_2 \sqrt{Z_1}} \\
= 20 \log \frac{l_1 \sqrt{Z_1}}{l_2 \sqrt{Z_2}}
\]

### Efficiency (for any device)
\[
Eff = \frac{\text{output}}{\text{input}}
\]

### Q or Figure of Merit
\[
Q = \frac{X_L}{R} \text{ or } \frac{X_C}{R}
\]

### Transformer Relationships
\[
\frac{N_P}{N_S} = \frac{E_P}{E_S} = \frac{l_S}{l_P} = \sqrt{\frac{Z_P}{Z_S}}
\]

### Frequency and Wavelength
\[
f_{kc} = \frac{3 \times 10^5}{\lambda_{\text{meter}}} \quad \lambda_{\text{meter}} = \frac{3 \times 10^5}{f_{kc}} \\
f_{Mc} = \frac{3 \times 10^4}{\lambda_{\text{centimeter}}} \quad \lambda_{\text{centimeter}} = \frac{3 \times 10^4}{f_{Mc}} \\
f_{Mc} = \frac{984}{\lambda_{\text{feet}}} \quad \lambda_{\text{feet}} = \frac{984}{f_{Mc}}
\]

### Length of Antennas
Formulas assume velocity of propagation equal to 95% of the velocity of light.
\[
L_{\text{feet}} = \frac{234}{f_{Mc}} \text{ (for quarter-wave antenna)} \\
L_{\text{feet}} = \frac{468}{f_{Mc}} \text{ (for half-wave antenna)}
\]
**Conversion Chart**

**Voltage and Power Ratios to Decibels**

The basic chart below indicates the number of decibels (dB) corresponding to the listed ratios of voltage or power over the range of -20 to +20 dB. For voltage or power ratios greater than those included in the chart, the ratio can be broken down into a product of two numbers, the value in dB for each found separately, and the two results added. Example:

2,000:1 to dB, express 2,000 as $2 \times 10^3$; the number of dB corresponding to a power ratio of 2 is nearly 3, and the number of dB for a power ratio of $10^3$ is 30. Therefore, the power ratio of 2,000:2 is approximately $30 + 3 = 33$ dB. In the lower right-hand corner of the chart, dB values for voltage and power ratios of integral powers of 10 are given.

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<th>Voltage Ratio</th>
<th>Power Ratio</th>
<th>dB-20</th>
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The chart values for voltage and power ratios of integral powers of 10 are given in the lower right-hand corner.
5/3 15m phone net - W6ZE/XO checks in IXN, VKZ, % WA8FBN (Jerry, Minneapolis, Mn), & YZG: XO says that NG7D is back frm Vegas, & XO & XYL spend all day at a horse show in San Diego, & Bob goes on a ride-along wid the Santa Ana P.D. this Fri. VKZ calls for volunteers to help wid the American Diabetes Assoc. Bikeathon to be held 5/13. Frank needs 7 or 8 volunteers wid 2m handhelds, one portable & 1 semi-portable packet stations. Editor of next (May) 'RF' is VKZ. IXN listens to Seismic Precursor Net on 146.460 MHz, & YZG checks in at net's end. Were you feeding the dogs, Lu? 5/3 2m phone net - W6ZE/IXN checks in BPX, VKZ, IMP, JC, JSV, RE, PFA, RND, HHC, AF6C, W9NQ (Bob, Mojave Desert), & YZG. IXN & Net interfere wid Bob & his QSO. Bob graciously QSYs to another freq. BPX weeds garden & plants okra. VKZ repeats plea for OPs for Bikeathon (above). Lew, BHQ, leaves for London tomorrow, & YZG & OPs wish Lew a safe journey home. IXN gives Lew a copy of 'RF' for the Guildford Club. RE plays vy interesting W.L. tapes, & Alex volunteers for ADA Bikeathon on May 13! RE's XYL has colon exam wid successful negative results! Russian MIR Space Station blows a fuse & 2 amateurs exit space station & return to Earth. HHC has an 'intermittent auto', & OPs open up wid suggestions: IXN:- the coil; RE:- the fuel pump or gas filter; PFA:- stuck float in carb; AF6C:- watch tachometer for analysis of problem. We will eagerly await HHC's solution! RND can't go to watch 'Shuttle' landing, & John mentions freqs. for OPs to monitor shuttle communications. JSV says Lew will be back in Sept. PFA also volunteers for ADA Bikeathon. IMP & Jane attend 'RV' show in Long Beach. N9NE takes Chris thru every vehicle... & now Jane suffers frm 'tiredlegitis'! Chris picks up a new Yaesu dualbander fer 2m-440MHz! JC can't copy VKZ & Mark gives OP, Ed, instructions abt joining Club. RE mentions that Lakers just won the Division title! 5/10 15m phone net - W6ZE/XO checks in IXN, NG7D, YZG, & COJ. IXN copies over 500 earthquakes to disc frm Jan. 13 on. NG7D gets a FREE catalogue frm Dick Smith!! (but refuses to pay $15 member's fee!) & John recovers frm a virus attack in time to dry out in Vegas fer 2 wks. XO feels last Sat.'s E.Q. at 11:08 pm, & YZG can't tell the difference between his 2 dogs after their 'bitch' haircut! & Lu discovers a break in the kitchen plumbing... A plumber & $38 later, & Lu is back in business! Lu will also bring a geology book fer IXN at next Meeting. COJ will bring 2 silk screens of old 'RF' letterhead to next meeting fer Bob, UL. Dave also gives Lu info. on 'Flyer's Net', which meets on 7250 KHz at 8:00pm Thurs. evens. 5/10 2m phone net - W6ZE/IXN checks in LAB, IMP, SDU, YZG, AF6C, COJ, RE, PFA, BPX, HHC, N6NPA (Chino), UJD, & JC. LAB relays NPA info. to Net Control, & John requests at least 2 more OPs for Diabetes Bikeathon. IMP goes fishing wid the CLARA Rptr Grp at Lake Skinner (no luck!) Chris reports Dotty, IBP, & Al, IBR, in gud health (& n8ne didn't even say 'Hi'!) Chris also picks up 2 Gen. Electronics pwr adaptors fer the HTs. SDU has a cheery fire in the fireplace. Fostre is shopping fer a computer, & spent time getting a rental house ready to rent. YZG & PFA discuss Lu's experiments wid a 'pipe' capacitor. And AF6C tells OPs abt 3 fellow workers killed in a recent plane crash. RE plays 'Westlink' tapes, & calls Rep. McCandless abt 220MHz up- coming congressional committee meeting, collects 5 cans of trash frm ard the QTH, & will help the Red Cross collect blood at Rockwell International tomorrow! BPX 'flies in & flies out'! HHC gets home late frm work... pres. of company is in Europe! UJD is mobile & his sigs improve as he gets closer! COJ has 2 towers fer sale! JC checks in & says 'Hi' to all. 5/11 15m CW net - W6ZE/IXN checks in N6UYF/TEJ (congrats, RJ, on the upgrade), NG7D, & RND. NG7D tells IXN (confirmed by JSV) that Paper Clip III is a gud word processor fer the C-128 computer. RND is working on his photo QSL wid a pix of Benchy paddle on it. UYF is preparing to attend his homeowner's assoc. annual get-together, where RJ will discuss earthquake preparedness. NG7d says that Tom, PFA, has been experimenting
(On The Nets...cont'd -2): wid his 'Sam Says' program on packet...sounds intriguing! RND was going to the Mts. this weekend wid the RV...too cold, now! After net, IXN invites UYF to come & join the fun wid OCARC at FD! 5/17 15m phone net - W6ZE/NG7D, filling-in-for-XO, who talks wid IXN before 2m net, checks in LAB, WZO, & IXN. LAB loads the 40m ant. on 15m wid his TS-440 & an ant. tuner. John reminds OPs abt Armed Forces Day 40th Anniversary this weekend wid QSL card opportunities!...info in last QST. Then John 73s to have supper before 2m net. WZO announces a new BBS packet station, NN6U, linked wid W6US & W6QBS, on 145.68 MHz, & IXN tells Fried abt OCARC packet net. NG7D gets a hot lead on a local store that sells gel cell battery packs, 10 amp., wid charger! John may also win the Nev. QSO PARTY award for CA. once again! Question!... What was Sandi, WZN, watching on Candid Camera? 5/17 2m phone net - W6ZE/IXN checks in LAB, BPX, JSV, RE, ATK, UJD, PFA, & IMP. RE plays interesting 'Newsline' tapes (no longer Westlink)! Alex also reads Bull. #21 (5/12) which concerned a House committee meeting wid ARRL reps, etc., to hear the reasons why FCC should not remove the 2 bottom MHz. of the 220 MHz amateur band. If any OPs wish to make contact wid Alfred McCandless, a member of this committee, phone (202) 2255303, Al's phone in Wash., D.C., or address letters to him at Rm 2158, Rayburn House of Representatives, Wash., D.C., 20515. RVS is back in the Vet's Hosp. fer abt 2 mo. BPX sprinkles, rakes leaves, etc. Wyatt says, "No sun, no heat, no grow!" (hw abt the weeds, Wyatt?!) JSV finishes big QSL card fer Lew, BHQ, fer all OPs to sign at Club meeting. And UJD suggests that all OPs bring individual QSL cards to be sent to Lew. PFA announces 'Angels' are winning, & he will discuss C-128 wid IMP & JSV after net. IXN suggests that ATK bring manuals to Club meeting so OPs can help iron out some problems. LAB reminds OPs abt Armed Forces Day. We missed the 'Ken & Bob' show! RE says FD site overgrown wid weeds. And JSV says Tim Black, new Ham, may join us at meeting! 5/18 15m CW net - W6ZE/IXN checks in NG7D/QRP & N6UYT. RJ goes fer his General theory test next week (gud luck, RJ), & NG7D tells IXN that he hasn't seen any gud computer deals lately. IXN must soon upgrade his computer. John has had 'minor ground motion' last 2 mornings as pavement is being removed on MacArthur Blvd. near the QTH. RF thought he felt a small quake just before net. IXN can't confirm it on the PXN repeater! We missed RND tonite! 5/24 15m phone net - W6ZE/XO checks in IXN, NG7D, & YZG. XO & XYL spend last eve. wid the horses, in utter chaos during fire which burned vy close to their barns! NG7D says new Ten-Tec QRP rig will be vy expensive, & XO & IXN comment on DX OP who charges for QSL cards! 5/24 2m phone net - Agn, W6ZE/IXN misses the 'Ken & Bob' show as he checks in BPX, LAB, IMP, JC, RE, NGO, & YZG. BPX finds 'worms' around garlic bulbs...Wyatt will 'declare war' on them tomorrow! He & Blanche will attend Union picnic on Sat. & Wyatt will receive his 45 yr pin! LAB checks in early, having talked wid an OP in Calif. City up to net time. John also reports success on numerous Armed Forces Day contacts. Bring the QSLs to meeting for all to see, John! IXN & IMP discuss IBR's XYL, Dotty, IRB, who will enter the hosp. in GG fer shoulder surgery next Wed. All OPs wish Dotty a quick recovery! RE congrats. LAB on Armed Forces Day successes, & Alex plays interesting 'Newsline' tapes! Alex also puts car in 'hospital' to get rid of 'humps & dents'...daughter borrows 2nd car...so Alex borrows a 'strange' vehicle! NGO, just back frm JA land, discuses gladiolas wid IXN, & tells all abt hsi new KW TM-231A wid pwr outputs of 5, 10, & 50 Watts fer mobile operation. 'My dogs walk all over me' says YZG's T-shirt. Lu reports everything quiet at the QTH...even the dogs!! Wedding bells ring fer JC's harmonic this Sat...Mark loses a daughter & gains a son-in-law! 5/25 15m CW net- W6ZE/IXN checks in John, NG7D. John works Armed Forces Day last Sat., & copies Sacy message frm Dept. of Defense, & sent in his copy fer a QSL card. (RE & LAB also copy message). IXN gets an XYL & a YL in the shack wid Set Theory problems in math, & 73s net to involve himself wid 'Union' Sets & 'Intersection' Sets! 5/31 15m phone net - W6ZE/XO turns net over to IXN...Bob develops a bad feedline problem! We check in COJ, ULU, &
(On The Nets...cont'd -3): NG7D. COJ is looking for screens of old Club logo back in the 60's. He will contact Cliff Frazier abt the logos. JSV is mentioned as a possible source for artwork if Club uses the old, or wants a new logo designed. ULU's QTH is undergoing major house repairs inside & out...new fence, new kitchen & painting! YZC battles dog fleas as he & Fran contemplate a 'hot tub' for the QTH! NG7D has worked all 50 states on 17m! Congrats, John! And NG7D also makes contact with long-silent N6PEL, Dan, on 40m! ULU looks for an accordion mike cable (10 strands) for the rig. Call Lloyd if you know where to get one (not Kenwood, pse!) 5/31 2m phone net— W6ZE/LXN checks in IMP (w/ I Burn Radios, on the side), YZG, RNA, ATK, RE, RND, PFA, OUE, & AF6C.

IXN asks Alex to play 'Newsline' tapes...most interesting! Alex also trims a Spanish Palm...all trash cans are full! IMP, IBR & nØne, all prepare for IBP's upcoming shoulder surgery, & we say a few prayers for her quick recovery! IMP talks abt impending lay-offs at Hughes. AF6C talks abt reorganization at McDonnell-Douglas, and, IXN says that Northrup is laying off...gud luck, guys! AF6C asks abt former Club member, Monte, WD6AUS. Monte, Vic, & Al (I Burn Radios) were all involved in the OCARC's VIP program for handicapped kids. AUS is fine, but his XYL is fighting cancer. Vic, (Real Nutty Amateur), reminds all abt help needed for the upcoming Wheel Chair Olympics events. PFA finishes construction of a spectrum analyzer, & WA6OUE, Mike, informs IXN abt office improvements at Garden Grove H.S. ATK wants sig reports, & most OPs hear him FB! YZG reminds all of the Club breakfast Sat. morning. AF6C will call ULU if he can find a source of a 10 strand mike cord for ULU's rig. RND copies Armed Forces Day message & works NG7D frm Wrightwood between the 23 & 28th of May. John also tells OPs abt 2 new USSR satellites...de W86LXN