What is ARES? What is RACES? Why not join us at meeting on May 15 to hear 'Corky' Corcoran, D.E.C., for Aries, enlighten us about these two amateur radio organizations that are vital to our favorite pastime! Ama in 1913. Why? There are over 70,000 licensed OP’s in ARES. What do they do? What does Part 97, subpart F, of the U.S. Amateur Regulations provide? Corky will also talk about various activities relative to ARES and how you can help. RACES, and how you can help. Corky has been an amateur radio OP since 1955-56. He has been with the Huntington Beach plant, he is circuit simulations. Educationally important meetings of the year. Don’t reality, why not invite some of the OP’s and the other new Novice bands? Let them to the art of Amateur Radio! No! This is N6HGI was forced to postpone his appearance at the March meeting. Come one! Come all!
1987 CLUB BOARD of DIRECTORS

President    Jim Talcott    N6JSV    838-5395
Vice President    Lloyd Harwood    WB6ULU    538-7081
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Member At Large    (Past President holds another position)

CLUB APPOINTMENTS

Club Historian    Bob Evans    WB6IXN    543-9111
W6ZE Trustee    Bob Eckweiler    AF6C    639-5074
R.F. Editor    Bob Evans    WB6IXN    543-9111
Teen Representative    (open)

CLUB FUNCTIONS

MONTHLY MEETING:    3rd Friday of each month, 7:30PM at:
MERCURY SAVINGS & LOAN
1895 Irvine Blvd. (4th St becomes Irvine)
Tustin, Ca. Talk-in on 146.55 MHz

May 15th

Jun 19th

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

Jul 17th

CLUB BREAKFAST:    1st Saturday of each month, 8:00AM at:
LE GRAND CAFE
2525 N. Grand Avenue
Santa Ana, Ca. (714) 997-5393

Jun 6th

Jul 4th

(1-1/2 blocks south of 22 FWY.)

CLUB NETS

<table>
<thead>
<tr>
<th>BAND</th>
<th>MODE</th>
<th>DAY OF WEEK</th>
<th>LOCAL TIME</th>
<th>FREQ MHz</th>
<th>OPERATOR</th>
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<tbody>
<tr>
<td>2 Meters</td>
<td>FM</td>
<td>Wednesday</td>
<td>2100 hrs.</td>
<td>146.550</td>
<td>W6HHC</td>
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<tr>
<td>15 Meters</td>
<td>SSB</td>
<td>Wednesday</td>
<td>2000 hrs.</td>
<td>21.375x</td>
<td>AF6C</td>
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<tr>
<td>15 Meters</td>
<td>CW</td>
<td>Thursday</td>
<td>2000 hrs.</td>
<td>21.175x</td>
<td>WB6IXN</td>
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</table>

(Listen for W6ZE, net control)    *Plus or minus QRN
With ARRL acting as VEC, the WCARC formed its first VE team. Our ULU, Lloyd, is a member of this team. Present plans call for testing the 3rd Thursday of each month before the general meeting. Testing will be conducted at 17911 Bushard St., at the corner of Bushard & Talbert in Fountain Valley. Testing sessions will begin at 6:00 pm, and the general meeting at 7:30 pm. For further info., call Lloyd Harwood, WB6ULU, at 538-7081.

*** ON THE NETS ***

4/1 15m phone net - IXN calls AF6C and assumes net control. W6ZE/IXN checks in LAB, IVP, NG7D, MZM, & WB2PCA/6. LAB fills us in on tests run with his new 7x10x14" power xformer with 250 μfd capacitance & 6 series-connected diodes in each leg! MZM & NG7D work a contest over last weekend (CQ - worked all prefixes). NG7D worked W3USU, the Capitol Hill R.C. in Washington, D.C., a Russian station, & exotic calls, ie: 4C2A(Mexico), AY3A(Argentina), & he heard a new KC3 call in Baltimore. MZM worked 914 stations & got 20 new countries. Now he is playing with a steam boat model he built for a physics project! IVP told us about a shorting device we used to discharge capacitors on 20 & 30 KW rigs. He dubbed it an 'Angel Stick'! Lou, WB2PCA/6 checks in from Garden Grove! Lou is trying to purchase a home. Wid a QTH of Queens, NYC., Lou hopes to make a change to 6 land. He had Dave Ramey, a CB'er, in the shack with him. Dave wants to get a Tech license, so IXN invited him to the OCARC class in May. Lou is staying wid Dave & family at 12721 Harbor Blvd., GG, 92640. Tel: 534-6487.

4/1 2m phone net - Via JSV, HHC checks in JSV, BPX, & RE. Old TVs, especially old Dumont wid the mirror on top, & Philos Farnsworth, TV inventor at age 14, were topics of discussion.

4/8 15m phone net - IXN fell asleep & missed the net. But, JSV, monitoring on the side, heard NG7D, MZM, & LAB talk about communications on 10m in 0.5 & 7 lands. ULU listened in also.

4/8 2m phone net - HHC finds another group on freq. and QSYs to 146.535. IXN/HHC checks in NAY, RBQ, BNR, EYS, & JSV. HHC's trip to Penna., and an auto accident in front of JSV's QTH were discussed.

4/9 15m CW net - IXN & family go to JSV & EZS's QTH for dinner. While Jeannie & Lee string guitars, JSV & IXN retire to the shack to check in LAB. IXN operates JSV's Commodore 64 wide CW program to talk with John, while JSV gives directions on the side. LAB got a condenser with enuf capacity & voltage rating to filter the output of his new transformer for the amplifier. JSV takes pix of the screen to show LAB his copy at next Club meeting. After net, IXN and JSV work Jim Hughes (call in JSV log) in Idaho.

4/15 15m phone net - AF6C turns net control over to IXN who checks in AF6C, HHC, NGO, RND, RE, NG7D, VQL, OUE (Mike), & LAB. (Nice check-in, Ops, let's keep it up!) RND & AF6C discuss AF6C's computer, & propagation. NG7D reports bands are improving. VQL, at bottom of Crawford Cyn, worked Costa Rica on his mini-quad. NG7D worked Malaysia, England, X51 in San Salvador, & he needs Honduras for his 'Worked All Central America'. RE informs us that new 'Form 610s' are available from League Headquarters! Alex also provides us wid name of prospective member for our new noVICE, tech class. VQL, NGO & others have been busy checking on Field Day sites, & VQL describes 2 sites; one at Rancho Santiago Campus near Irvine Park, and another at Yorba Linda NOCC Education Center. HHC informs us that the 25 Van-Couver Protocol for packet is no longer used. Also, tune to 145.360 packet freq. for Bulletin Boards, etc., and 145.010 for out-of-state activity. RE reads ARRL Bulletin #31, dtd 4/10, which, becuz of low power, excludes hams from monitoring RF radiation effects. RND 73's, & W6ZE listens to finals & lets the gang move to 2m.

4/15 2m phone net - W6ZE/HHC checks in AF6C, NGO, RE, NG7D, ULU, & OUE! On the side, the guys had a new OP booming in over the mountain from Rancho California! RE reads the Westlink tapes followed by ragchew.

4/16 15m CW net - W6ZE/IXN checks in RND. John has next 3 days off, but house chores. etc. will keep him busy. John suddenly leaves net! Xmtr down? No, XYL interrupts with an urgent call from work! W6ZE closes net.

4/22 15m phone net - W6ZE/IXN checks in ULU, MZM, RE,
(on the nets - cont'd):
ULU, & WB2PCA/6. ULU prices ICOM 03AT over $400 at Henry Radio in LA. MZM reports a price of $399.50 from a catalogue. IXN reports that Chris, IMP, will not be operating MM/3 from the Pacific. ULU tells OPs abt a collision of outfielders in the 'Angel' game, & RE updates us on improving propagation. RE reads ARRL Bulletin #32: FCC has not revoked the license of Dave Hildebrand, N6VHU, but only reprimanded him, for use of indecent language on the air! Corky will feature the May Club program wid Public Service Communications as the theme. PCA asks us to send an 'RF' to Dave Ramey, a prospective novice. (didn't report for first session!) MZM hears Europe on 20 & Africa on 15. MZM will send IXN a copy of WWV solar report transmissions. MZM also connected up the old phone patch & is putting it to good use. 4/29 15m phone net - W6ZE/IXN checks in MZM, LAB, ULU, & RE. MZM & EGC try out their Kantronics packet wid success. LAB experiments wid helium balloon & long wire ant. (1/2 wave) on 30m.; has problem wid SWR when wind changes antenna slope. LAB tells us abt a low frequency experimental top-loaded antenna for low frequencies, located near Bakersfield, for use in a nuclear attack. RE tells us that Ralph, JBI, is from Brunei, Borneo. RE gets some rare DX from Brunei, V8SHG. RVS, Dale, is having trouble with his legs & RE takes him to hospital. ULU gives IXN further info. on VE program of WCARC. Concerning Volunteer Week, RE reads ARRL Bulletin #34 expressing League appreciation to volunteers for their efforts and sacrifices. EGC is already an 'Extra', and MZM will test this weekend, trying to join dad! 4/29 2m phone net - W6ZE/AF6C checks in RE, JSV, & ULU. HHC is in hospital wid appendicitis attack. RE reads 2 wks of Westlink tapes. And JSV & ULU discuss 'Quantum Link', a bulletin board for Commodore computer users.

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DEAR, SOME OF OUR NEIGHBORS ARE HERE TO SEE YOU ABOUT WHY THEIR TVs AND STEREOS ARE DOING FUNNY THINGS.

QRM

THE 2 GALLON LINEAR

page 4
FCC regulation part 15, paragraph 15.112, allows operation of a unlicensed transmitter between 160-190 KHz. The power must be 1 watt or less and the antenna and feedline must be less than 50 feet long. There exists a group of experimenters that run beacons on these frequencies. Although no license is required, most of the experimenters are hams. QV is usually used although AM, SSB, RTTY, and ASCII have also been used. Despite the severe limitations on power and antenna, reception of the beacons over paths of hundreds of miles is not uncommon, and one West Coast beacon has been heard in Hawaii! Reception on paths of about 100 miles is often routine. (List compiled Feb. 25 Source: Western Update #43)

<table>
<thead>
<tr>
<th>Freq (kHz)</th>
<th>Ident</th>
<th>QTH</th>
<th>Schedule Information/Owner</th>
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<tr>
<td>164.025</td>
<td>MAX</td>
<td>Wheatland, WV</td>
<td>24h/7d QV (BPSK/ASCII on req)</td>
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<td>163.93</td>
<td>AVW</td>
<td>Independence, OR</td>
<td>24h/7d W7AUV</td>
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<td>163.93</td>
<td>MSG</td>
<td>Paso Robles, CA</td>
<td>intermittent W6MSG</td>
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<td>165.48</td>
<td>Z2</td>
<td>San Simeon, CA</td>
<td>24h/7d note QSY W6SEER</td>
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<td>166.667</td>
<td>HDOCCW</td>
<td>Morro Bay, CA</td>
<td>24h/7d new antenna W6HDD</td>
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<td>169.937</td>
<td>ISUN</td>
<td>Durant, OK</td>
<td>24h/7d if W7 permits K4SWH</td>
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<tr>
<td>171.423</td>
<td>B</td>
<td>San Simeon, CA</td>
<td>by request W6SEER</td>
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<td>174.35</td>
<td>FAW</td>
<td>Orem, UT</td>
<td>0600C-sunrise W7FS</td>
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<td>175.783</td>
<td>CO</td>
<td>Glenwood Springs, CO</td>
<td>24h/7d WB7PAW</td>
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<td>176.25</td>
<td>BA</td>
<td>Lancaster, IL</td>
<td>24h/7d K106</td>
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<td>176.3</td>
<td>MUK</td>
<td>San Luis Obispo, CA</td>
<td>24h/7d W9PDE</td>
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<td>NVA</td>
<td>Pahrump, NV</td>
<td>24h/7d N3MUK</td>
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<td>177.566</td>
<td>UCP</td>
<td>Saratoga, CA</td>
<td>24h/7d K7VU</td>
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<td>177.518</td>
<td>CT</td>
<td>Flagstaff, AZ</td>
<td>z-abt 1400-1700 W6UCP</td>
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<tr>
<td>178.893</td>
<td>MPH</td>
<td>Salt Lake City, UT</td>
<td>24h/7d improving antenna K4SSE</td>
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<tr>
<td>180.6</td>
<td>NX</td>
<td>Morro Bay, CA</td>
<td>temp off the air K7RJ/WB7CAK</td>
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<td>181.168</td>
<td>IZJ</td>
<td>San Gabriel, CA</td>
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<td>G</td>
<td>Palo Alto, CA</td>
<td>d-off 0700-1100 W6I2J</td>
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<td>FPV</td>
<td>Granada Hills, CA</td>
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<td>PRK</td>
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<td>EK</td>
<td>Sunnyvale, CA</td>
<td>24h/7d K96EK</td>
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<td>184.5</td>
<td>JR3</td>
<td>San Anselmo, CA</td>
<td>24h/7d 9 1/2 w/m step KF6VG</td>
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<tr>
<td>184.795</td>
<td>MEL</td>
<td>San Jose, CA</td>
<td>24h/7d K8ePAW</td>
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<td>185.49</td>
<td>AZ</td>
<td>Tucson, AZ</td>
<td>24h/7d Note QSY K4XY</td>
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<tr>
<td>187.02a</td>
<td>OWR</td>
<td>Paso Robles, CA</td>
<td>24h/7d WA6ONR</td>
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<td>UPR</td>
<td>Cincinatti, OH</td>
<td>1800-0600 local WB9UPN</td>
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<td>187.594</td>
<td>SM</td>
<td>San Jose, CA</td>
<td>24h/7d W6KZL</td>
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<td>189.47</td>
<td>HDQ</td>
<td>Daleville, IN</td>
<td>24h/7d K9HDQ</td>
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<td>189.720</td>
<td>8LXJ</td>
<td>Morrow, OH</td>
<td>24h/7d W4KLXJ</td>
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<tr>
<td>189.8a</td>
<td>NTS</td>
<td>Mercury, NV</td>
<td>24h/7d AB5S/7</td>
</tr>
</tbody>
</table>

a=approximate frequency

times are local, unless otherwise noted, Z=GMT

This list is compiled from "Western Update", a monthly Lower Newsletter available from:

Jim Ericson KG6EK
226 Charles St.
Sunnyvale, CA 94086

Send a SASE for each issue desired. A small donation towards printing costs is suggested, but is not mandatory. (via shack of AF6C)
UNITED ARAB EMIRATES. A61AB, KHALID, NOW ACCEPTABLE FOR DXCC, HAS BEEN WORKING AROUND 1500 TO 1700Z ON 14226 KHZ. QSL TO WA3HUP.

LIBYA. BERT, 5A8A, ALSO NOW ACCEPTABLE FOR DXCC, IS VERY ACTIVE FROM BENGHAZI. HE IS USUALLY FOUND ON 20 METER CW AROUND 1600Z AND 40 METER CW AT 2100Z AT THE LOW END OF THE BAND, OCCASIONALLY WORKING UP INTO THE GENERAL PORTION. HE ALSO WORKS SSB ON 15 METERS AT 21266 KHZ AROUND 1830Z ON. QSL VIA SP6BZ.

EUROPA. FR5ZU/E, JACQUES, IS ACTIVE NOW FROM THIS FRENCH INDIAN OCEAN ISLAND WHICH COUNTS FOR DXCC THE SAME AS JULIAN DE NOVA. HE HAS BEEN WORKING THE FRENCH NET ON 14116 KHZ, THE EUROPEAN NET ON 14275 KHZ AT 1600Z, AND HAS BEEN COMING UP ON THE DX NET ON 14183 KHZ AT 1830Z. HE SHOULD BE ACTIVE FOR SEVERAL MORE WEEKS, THEN ON TO TROMELIN.

CHINA. ZONE 23. BY0AA, 14024 KHZ AT 0030 TO 0145Z ON CW, AND BY9GA, 14226= KHZ AT 0005Z ON SSB, ARE GOOD PROSPECTS FOR THOSE NEEDING THE RARE ZONE 23.

PACIFIC DX. 2K3PM, PETER, ON TOKELAU, ZL7AA, BOB, ON CHATHAM ISLAND AND KX6AZ, ANNABELLE, IN THE MARSHALL ISLANDS, CAN BE FOUND NIGHTLY AT 0200Z ON 14369 KHZ, ALONG WITH OTHERS FROM THE PACIFIC AREA.

THE SUDAN. ON1IP/ST2, STAN, IS NOW ACTIVE ON 20 METER SSB AROUND 2100 TO 2300Z.

NEPAL. 9N1MM, FATHER MORAN, IS AGAIN ACTIVE WITH W3WGS AT 0030Z ON THURSDAYS ON 14226 KHZ.

ARGENTINA. THE GACW CLUB HANDLES QSLs FOR MANY ARGENTINE DXPENSIONS. THEIR ADDRESS IS GACW, CARLOS DIEHL 2525, 1854 LONGCHAMPS, BUENOS AIRES, ARGENTINA.

CAYMAN ISLANDS. RICK, NK9G, IS OPERATING AS ZF2KS. WATCH 14270, 14060 AND 7060 KHZ. HE ALSO PLANS TO OPERATE FROM JAMAICA AS NK9G/6Y5. QSLs FOR BOTH OPERATIONS GO VIA NPAW.

CHRISTMAS ISLAND. PETER, VK9XP, REPORTS THAT HE HOPES TO BE MORE ACTIVE IN THE COMING WEEKS. HE WAS RECENTLY WORKED ON 14 MHZ SSB WITH AN EXCELLENT SIGNAL. QSL VIA BOX 59, CHRISTMAS ISLAND, INDIAN OCEAN.

EUROPA. FR5ZU/E WILL CONTINUE ON EUROPA UNTIL THE END OF APRIL, THEN HE PLANS TO GO TO TROMELIN. HE HAS BEEN MOST ACTIVE ON 21 MHZ SSB, BUT HE IS BECOMING ICHIEV ON 14 MHZ.

NIUE. 2BIG, ZK2EKY, WHO IS ALSO SP5EKY AND UK2EKY, IS ACTIVE FROM NIUE ON 14 MHZ SSB. WATCH 0500 TO 0700Z. QSL VIA UK2EKY.

THAILAND. HS0B IS LOCATED IN THE CENTER OF BANGKOK. THEY HAVE A TH3DX AT 18 METERS. THEY ARE ACTIVE ON FRIDAYS, SATURDAYS AND SU QSL VIA BOX 2088, BANGKOK.

VIETNAM. A STATION SIGNING UA9LDF/XU HAS BEEN REPORTED ON 14012 KHZ AT 2130Z. (Frm the shack of AF6C)
HAM RADIO HISTORY...
4 BILLION B.C.: Earth is a swirling ball of flaming gases. Propagation is extremely poor.
1 BILLION B.C.: First dry land appears. It is divided up into squares. County hunters club formed.
400 MILLION B.C.: Flowering plants and grasses evolve. Telerex invents the first beam antenna but sales are slow because of lack of suitable structures.
300 MILLION B.C.: First tree appears. It is immediately cut down, stripped of its branches, placed in a concrete base and named a telephone pole. Telerex sells its first beam.
100 MILLION B.C.: First mountain appears. Repeaters invented.

50 MILLION B.C.: It is decided by NARC that "seek you" is too cumbersome to send on CW. So abbreviation "CQ" is invented.
4 MILLION B.C.: Humans replace swines as dominant species. The name "Ham Operator" hangs on however.
2 MILLION B.C. to 800 A.D.: Nothing much happens for a long time.
900 A.D.: Chinese invent gunpowder.
WYAA is first "Big Gun" DXer.
1961 A.D.: Second repeater erected. First repeater group refuses to change frequency. First frequency coordinator appointed.
(tnx Charro Newsletter via WorldRadio and West Coast ARC Intermod) (author Joe White K0CNV) (tnx, NARC Newsette)

COMMODORE 64 INFO...In response to an earlier note in the February BIE column we hear from Ed Ludin, K2UK. There is another way to convert a program file to a sequential file on the Commodore 64 which I think is better.

1. Load the program to be converted.
2. Type the following on the keyboard:
OPEN8,B,"FILENAME,S,W:CMDB8:LIST <return>"
("FILENAME", of course, is the name of the file you want saved on the disk as a seq file.).

3. The disk will run. After a while, the disk may or may not stop running but the red light will stay on. You will see the flashing cursor reappear on the screen.
4. Type: PRINT<RETURN>. The disk will run for a short while and the red light will go off and the drive will stop.
5. You now have an ASCII Seq file named "FILENAME" on the disk ready for transfer. (tnx NARC Newsette)

*** ARE YOU USING BELDEN 9913 COAX? ***

Are you using Belden 9913, International 9086 or Columbia C-1180, and having trouble finding the right size connectors? Check with RF Industries in Hialeah Florida, they have all kinds of connectors, here are a few:

RFN-1002-SI "N" type Male solder type
RFN-1006-1-SI "N" type Male crimp type
RFN-1024 N "N" type Female solder type
RFB-1101-SI "BNC" type Male solder type

RF INDUSTRIES, 690 W. 28th St., Hialeah, Florida 33010 ph: 305-888-1676 (tnx, KEYCLICKS)
The idea is to have an amateur available to go to a pre-assigned site in case of any emergency, be it fire, flood, or the "Big One". To be available means simply that the person lives or works very near a school site during the hours that school is in session, and would need minimal transportation to get there. The responsibilities of the amateur would include meeting with the site administrator (principal), the custodian & other key persons, & become familiar with the locations of emergency items, ie: gas, water, first aid supplies, etc. If you live or work near a school during session hours & can possibly help in this program, look for enrollment blanks at your Club meetings or contact (for Orange County Schools) Mary Pagel, KA6IGG at (714)772-5451. PLEASE do consider seriously this very essential need for our children's safety!!

(714) 871-7000

MIKE NASH

Industrial Electronics Inc.

Industrial Electronic Parts
232 Orangefair Mall
Fullerton, CA 92632

Deadline next "RF" Friday
June 5.