



R
F



ORANGE COUNTY AMATEUR RADIO CLUB

VOL. XXXIII NO. 5

P.O. BOX 3454, TUSTIN, CA 92681

MAY, 1992

Prez Sez

by Frank Smith, WA6VKZ

I hope all those who participated in the "Camp-In" April 24, 25, & 26, 1992 survived without lasting or permanent damage. I think that all who participated enjoyed themselves. Three morse code tests were administered and passed. Congratulations to Anita, KD6BWQ, now a General; to Bob, KD6BWH, now a Tech Plus and Skipper, KC6WJJ, now a Tech Plus! I, personally, enjoyed myself very much. I removed my wristwatch about 3 P.M. on Friday and did not return it to my wrist until 11 A.M. on Sunday. Entertainment was great thanks to Alma, KD6AQO, Lee & John, WA6RND. The campfire discussion Friday evening was very interesting. Several after-shocks were heard and/or felt from Wednesday evening's shaker.

Awhile back I took delivery of a notebook computer that came equipped with DOS 5.0. I am not much for knowing the inner-workings of a computer so I purchased a self-taught book on how to learn DOS 5.0 from CROWN BOOKS in Tustin. I worked my way through about 30% of the book when my computer would not do what the book indicated it should do. Figuring that I made a mistake (hardly) I started working the book again, same result. The third time I worked the book I checked each and every step off with a "Hi-Liter", just in case I might have made a mistake, same result. I returned the book to CROWN

BOOKS and explained the problem to the manager, he gave me a receipt and said that a check would be forth coming in about three weeks. Five weeks later I visited the CROWN BOOKS store and was informed that I would not get a refund because I had marked the book. The book was a tutorial workbook that should be marked and CROWN BOOKS

spend my money at CROWN BOOKS (for computer related books COMPUSA is less expensive but the book still has the same error). 73's FRANK, WA6VKZ

May Speaker:

**Tom Thomas,
WA6PFA,
on Amateur TV**

no refund policy for marked books seems to be unreasonable. Needless to say that Rule #1 (customer is always right) did not apply in this case. In my own hard-headed method of protest I will no longer

May Program Notes

Comb your hair, and put on clean clothes before coming to the May meeting. Our own Elmer (Tom) Thomas, WA6PFA, will be talking on an interesting mode being enjoyed by a small group of amateurs: fast scan television. The final details are still being planned, but there will probably be a video on a recent ATV balloon launch and a demo of a typical ATV station. There is a good possibility that club members will be able to

talk to, and SEE and BE SEEN by many active ATV hams in the area. Tom is trying to arrange to have some of them "join" our meeting from their home ATV stations. There will be no commercial station breaks during this live demonstration. Amateur Television is a fascinating aspect of the hobby, and not very expensive to get started in. (Especially if you own a video camcorder). Be sure to attend the May meeting. Maybe you will enter into a whole new area of ham radio.

The June meeting program will be slides, videos, movies and "what have you" of past Field Days. If you have something for the program please let me know at the May meeting. Videos should be edited and short. Please let me know what you have and we'll get it assembled. -30- Bob, AF6C

In This Issue Page

Prez Sez	1
Speaker Notes	1
Innova Power Pack	2/6/7
April Meeting Minutes	2
Net Notes	3/4/5
May Board Minutes	5
Editor's Note	5
1991 Financial Statement	6
New Members	7

The Innova Power Pack

Power that Gear at a Fraction of the Cost

by John P. Christopher, NG7D

Recently, I became aware of a new product being manufactured, right here in Orange County. That's right, it's made in the USA. It's called the INNOVA POWER PACK.

The Innova Power Pack is a self-contained sealed (maintenance free) 12 volt DC Lead Acid Rechargeable battery, and power recharger. It measures in size 7.25 inches wide by 10 inches high, by 3.25 inches deep. It's about the size of an older type 2 meter mobile transceiver. The case is made of a high impact plastic, black in color.

Unlike Ni-Cad batteries, which start to discharge the minute you take them out of the charger, a lead acid battery will retain its charge over a long period of time, thus it is safe to store it on a shelf for months, with only a slight discharge of the original voltage level. The manufacturer rates the battery good for at least 1000 recharges, so even if the battery

were used daily and recharged, that's almost a 3 year usage life. Most Ni-Cad packs last only half as long, at twice the cost! Currently, the Innova Power Pack is available in the Automotive section of Target Department Stores, selling for \$39.95 plus tax, as well as in the Dak catalogs, at a higher price, I'm informed.

When compared to the Quantum power pack, which sells for \$129+ dollars around these parts, the Innova is a much better value. The only disadvantages are: the Innova is much larger than the Quantum pack in size and weight (6.8 pounds so it's not belt mountable.) However, the Innova Power Pack will outlast the Quantum 3 to 4 times longer in power usage, and can be used in a back pack type arrangement, if needed for field service of the two legged kind, or shoulder mounted, with the nylon carry strap that comes with the Innova.

Continued on Page 6

Minutes

General Meeting

April 17, 1992

Meeting was called to order at 7:37 PM By Frank Smith, WA6VKZ. Board member absent was Clark, WA3JPG.

The speaker was Catherine Deaton of the FCC. There was a video tape presenting a general overview of the FCC. There is also a new procedure for TVI - the FCC no longer accepts or investigates complaints from the general public. They now issue a booklet advising how to correct the problem and ask that people work with each other in correcting TVI.

Old Business

Bob, KM6TL, Activities Chairman, reminded all of those who are participating in the Campout on 4/25 & 4/26 that there is still one available space left and that money needs to be paid to the Treasurer.

Field Day - still need a 40M captain. 20M CW will be handled by Phil Lonzele, WA6LDI. Tom, WA6PFA, will be the captain of the 10M station.

There was a correction to the minutes of the 3/20 general meeting - the old coffee pot is too small - not non-working. After correction was made all minutes were accepted as published.

Treasurer's Report

Checking - \$ 1,291.35 Savings - \$ 1,164.00 Cash on hand - \$ 144.60

Good of the Club

WA6BPX is out of the hospital and back at Orangewood. Blanche said he is doing much better.

The ICOM handheld was raffled. The winner is Paul Stubb, KC6PZC.

Thanks were given to Jim Talcott, N6JSV, for doing the certificate that was given to Catherine Deaton. Fine work Jim!!!

Meeting was adjourned at 9:40 pm

Respectfully submitted
Jane Breller, KC6TAM, Secretary

1992 CLUB BOARD of DIRECTORS

President.....	Frank Smith.....	WA6VKZ.....	838-3180
Vice President	Bob Eckweiler.....	AF6C.....	639-5074
Secretary	Jane Breller.....	KC6TAM.....	213/866-2077
Treasurer	Carmine Fiorello...	AB6KE.....	837-5133
Activities.....	Bob Schnabel.....	KM6TL.....	776-8486
Membership	Bob Buss.....	KD6BWH.....	534-2995
Public Relations ...	Cindy Hughes.....	KC6OPI.....	971-3448
T.V.I. Chairman ...	Clark Turner.....	WA3JPG.....	856-2131
Member at Large ..	Ken Konechy.....	W6HHC.....	744-0217
Member at Large ..	Mike Abreu.....	K6KAA.....	832-8503

CLUB APPOINTMENTS

Club Historian	Bob Evans.....	WB6IXN.....	543-9111
W6ZE Trustee.....	Bob Eckweiler.....	AF6C.....	639-5074
RF Editor	Nancy Bucher.....	N6XQR.....	537-8728
RF Printer	Jerry Dahlin.....	AA6BU.....	527-2779
Refreshments.....	Cindy Hughes.....	KC6OPI.....	971-3448

DUES

Regular Member.....	\$12.00	Additional Family Members ..	\$6.00 each
Teenage Members (under 20).....	\$6.00	Optional Club Badge.....	\$5.00

Dues for new members are prorated quarterly from January of each year. Family members must reside at the address of a Regular Member. One RF is sent per household.

On the Nets -- April, 1992

by Bob Evans, WB6IXN

4/1 15m phone net - W6ZE/AF6C checks in IXN, QW, RND & YZG. IXN tells all that Wyatt, BPX, is doing FB recovering from the stroke. IXN alerts RND that Bob, WWP, & Anita, BWQ, may be joining us on the 15m CW net soon! AF6C asks for a volunteer NC for next week. Bob will do badly needed 'surgery' on the rig, & it may not have recuperated in time for net next week! With the XYL in Big Bear, QW joins other OPs working the WPX contest, picking up some badly needed countries, not to mention successes with the S. Sandwich Is. & E. Europe on 10 & 20m! RND bicycles with his Wed. group, only to get caught in the rain storm. Under a store-front overhang, he and the group dodge waves of water thrown at them by passing merciless motorists! John will get rpts. on the new 2m ant., purchased at the TRW Swap Meet, on the 2m net tonight. YZG, still engrossed with the computer, presently uses the rig only to check into this net! Lu is having problems installing a high speed modem (9600-14,000 baud).

4/1 2m phone net - W6ZE/IXN checks in NG7D, ZH & TAM, RE, VPP, HHC, OPI, RND, QW, WTY, VDP, XQR, ESD, FHU, DLA, YKH, PFA, KAA, & ULU. KAA, ESD, & ULU 'fly in & fly out!' NG7D gets back from the doctor in time to miss the rain. And John joins other OPs in working the WPX contest. QW comes back to John with ad of NP2I that John requested of the net. ZH & TAM tax OPs at the Square Dance for the BD cake on Chris' BD. And ZH garners some new countries during the WPX contest! Mother Nature opened her zipper & out it came, commented VPP on the recent rain & thunder storm, as Bud finished watching the astronauts aboard the Shuttle on ATV. HHC & Diane take time off from arranging the new QTH, to attend the Club square dance. Ken now has the packet station, modem, 440 & 1.2 GHz on line! ONZ, listening to OPI describe the thunder, lightning, square dance, and ONZ, sticks his tongue out at her! And Cindy says the ice cream social at school, for the purpose of gangs discussion, was not too successful! RE learns to run JPG's 530 quite well. And Alex reports more drizzle than rain from the last storm. RE airs an excellent Newline! RND gets rave reports on the new MFJ 5/8 wave 2m ant. he purchased at the Swap Meet. QW continues to garner the rare DX as he plans to add 20m to his WAS list. WTY likes Eddie Arnold songs sung by Lee Evans at the square dance. And Carmine mounts the 'Texas Bug Catcher' ant on the back fence, & checks with VDP on performance improvement techniques. VDP stays inside out of the rain & catches Portugal & the Canary Is. on 40 SSB, with a PY0, CW, at the bottom of 40! XQR prepares for the Club breakfast on Sat., talks about the upcoming April campout, & tells OPs to be thinking about Field Day! BWQ passes Gen. theory, & VKZ's harmonic passes Tech & Gen. theory. Congrats, OPs! FHU checks in from art class, and DLA, returning from New Mexico, spends time learning about his new dual band 741 toy! We welcome YKH, Bill, back on freq. Bill announces computer BBs at the following

numbers: 730-6790, 962-1857, 730-6743, and 730-5739. PFA, Golden Retriever in lap, watch the cloudburst add 1/4" to the rain gauge! And Tom prepares for the Baker to Las Vegas Relay Race, with 132 organizations entered at 20 runners each, this weekend!

4/2 15m CW net - W6ZE/RND checks in IXN, JPG, XQR, NT, & WTY. All OPs welcome Carmine on board for the 1st time! IXN reports a 'slow roller' earthquake registered on Crystal seismometer. (A 6.6 in Indonesia) JPG gets the old TS-520 working. Nice sigs, Clark! And Clark, the straight key fist is FB! XQR updates OPs on Club members studying code, & Carmine tells Nancy his rig is a Knwd 850. NT gives OP sig reports all around & Ray plans to attend the Club breakfast Sat. morning. RND hears all OPs FB, and John asks JPG for an ant. rpt. A couple of long wires, says Clark!

4/8 15m phone net - W6ZE/AF6C checks in XTJ, IXN, YZG & RND. XTJ is trying to catch up with the chores after a bout with the flu. And Jim talks about an impending General Dynamics Swap Meet move. IXN talks with Blanche, & reports on Wyatt's progress. Wyatt is back in the hosp. after bleeding is discovered in his intestines. YZG reports Arafat is still alive & kicking, so Lu continues the completion of his IRS tax forms! RND talks with the harmonic up in Bishop, and contemplates another RF choke for the RV5 ant.

4/8 2m phone net - W6ZE/IXN checks in OPI/M, ONZ & FZE, NG7D, AF6C, RE, TAM & ZH, HHC, FHU/AA, XQR, FLP/KT, RND, QW, FHN, PPF/KT, AB6KE/M, & XTJ. KE, PPF, & FHN 'fly in & fly out!' OPI enjoys a contact with the Disney ARC at the Queen Mary, & OPI is out shopping now. ONZ & FZE are holding down the fort in Cindy's absence. NG7D reports on XO's progress, telling us Bob will try to get to next Club meeting! And John enjoys 75-80 deg. temps. on a recent journey to Las Vegas. AF6C attacks the old tube low band receiver over the weekend, replacing an S-meter pot and doing some 'house cleaning' inside. And Bob tells OPs about our next Club meeting speaker from the FCC! RE ignores the 'weed patch' long enough to run the 720-A down to EICOM for repair of an RIT control for teletype. Alex shares Newline with us, with a QSL ad. for SAREX QSLs: With your return ad on our SASE, include: STS 45 QSL 2-way, and send the envelope to: Sterling Park ARC, PO Box 599, Sterling Park, VA. 22170. And RE says for the latest on the termination, or new location, of the Pomona Swap Meet, tune to the Crestline machine at 146.85 (might be moving to Rancho Cucamonga). TAM & ZH attack the 'bees in the belfry'. or I mean, the rosebush, as the exterminator eradicates approx. 100,000 bees, sending a sample off to see if they are killer bees! HHC, home recuperating from minor surgery, gets the station, modem & packet, up and running! And congrats to KE on the new call, and to PPF & FLP & FHU and all OPs who recently upgraded!! RND, getting used to PDT, finds time to copy RTTY with the computer. QW wants to sell the 940 & jump up to an FT-1000! Rolf finishes the amplifier conversion which occupied his time, along with filling out

Continued on Page 4

Net Notes - Continued from Page 3

papers for the 5 band WAS! XTJ, word processing a paper due by month's end, manages a little AMTOR last week.

4/9 15m CW net - W6ZE/RND checks in IXN, NT, XQR, HYL, & KE. Biggest check-in ever!..And gud sigs & gud cpy on our newest check-in, Carmine! NT provides sig rpts on all OPs. RND asks XQR abt the roster, & Nancy says BWH has included it wid Apr. 'RF'. HYL can barely copy all OPs. Larry hear NT better than anyone else. XQR doesn't cpy HYL. And Nancy tells OPs that our CW net is her only CW practice! RND closes net to go watch the Dodgers on TV. And IXN can copy all OPs quite well!

4/15 15m phone net - W6ZE/AF6C checks in YZG, XO, IXN, & RND. AF6C 'hobnobs' wid Fri. nite's Club YL speaker frm the FCC! And XO checks in while completing a QSO on 2m wid an OP near Lake Matthews. And YZG quips 'Dr. DOS' to AF6C, but Bob says the new version is Apple GSOS 6.0 for his computer. XO's ant. is working FB now that recents rains gave it a gud washing! And RND tells OPs of his recent visit to the LA Maritime Museum, Berth 84, San Pedro Harbor, and of A6AA, the ARS there. And John bought a book, "QTC", all abt the history of radio aboard ships!

4/15 2m phone net - W6ZE/IXN checks in RE, XTJ, NG7D, FHN, RND, HHC, HPK, QW, XQR, OPI, FHU, FZE, ONZ, ZH, TAM, & KE. RE & XYL celebrate 58 yrs of marriage, as Alex is 'chief cook & bottle washer' for the visiting harmonics frm Palo Alto & West Covina. RE also gives FHN, FHU, & FLP another ham motorcycle contact: W6PEO, ph: 962-1960. VKZ, RE & other OPs work the 'Ride & Stride' Diabetes Marathon over the weekend. Then Alex airs 'Newslines'. XTJ prepares for upcoming bicycle racing season, and Jim helps OPs track down an insistent jammer! 'To sneeze, or not to sneeze' utters John Christospere, as NG7D battles a head cold & allergies, works an IT2 & an SM6 on 15 yesterday, & discusses mutual Innova battery problems wid IXN! IXN asks John to scan the Riverside dogpound freq. at 151 MHz, if there is an earthquake in the area. FHN, FHU, & FLP continue experiments wid 2m mobile bike ants. IXN asks one of the trio to report their results in a future issue of 'RF'. FHN continues to wrk on CW fer upgrade. RND checks the 'electronic unit' on the RV to find a transistor and a heat sink. He learns how to fix it & prepares for the April campout after Easter. HHC doesn't hve the 2m ant. roof-side yet, as Ken switches between the shack & attic ants. KD6HPK, a new ham, who works wid HHC, checks in frm Ken's shack. HPK, Bill, will be in contact wid his brother in Grass Valley when he sets up his shack! QW thinks abt a squirrel fan to quiet down the amplifier as Rolf climbs toward completion of the 5-band DXCC, concentration on 20m at present! XQR & BWH hope all received their 'RFs' wid the new Club roster! And Nancy upgrades her Pagemaker program wid new Windows, too! OPI, wid FZE on the side, mobiles to the postoffice to drop off the taxes! FZE says ham radio program at his school may hve to wait until summer

school. ZH & TAM find time to check up on IBR, AI, & IBP, Dotty, as Chris & Jane go after that rare DX wid a 5Z4 frm Kenya, & an HC1 card in frm Samoa, just for a couple! AB6KE uses 'The System' to contact Leonid, UA3DRB, north of Moscow! Hm! Maybe Carmine & Rolf shud get their heads together to battle their ham-hating neighbors!

4/16 15m CW net - W6ZE/RND checks in IXN, NT, XQR, & HYL. IXN copies all OPs, wid Larry the weakest sig. But NT copies HYL a 599, wid the rest of us kinda weak! XQR & RND try in vain to bring Anita, KD6BWQ, on line! But nary a dot or dash is heard frm her silent key! RND tells all he has the RV nearly ready & will report to the April campsite on Thursday, a day in advance! Did we hear Larry say that he was experiencing 'Tennessee Valley Indians' on his TV!? And who is Krystal, Larry?

4/22 15m phone net - W6ZE/AF6C checks in RND, RE, IXN, COJ, YZG & XQR. NGO is welcomed bk frm his trip 'across the pond' by all OPs. And Kei informs AF6C that his return aircraft was NOT of Douglas vintage! Bob was glad that Kei had a SAFE return trip! KE will call IXN's brother, Lee, abt upcoming Club campout at JTN Monument. And Carmine says that 9N1MM, Fr. Moran, Nepal's most famous amateur, passed away. COJ saves the Club some money on Club decals & pathces. Tnx, Dave! YZG's medical status continues to improve. And AF6C offers to take Lu to Club meetings, & Lu gets the new MODEM working properly! IXN announces the 4.2 mag. 19:25 foreshock 9 mi. east of Desert Hot Springs. (Big 6.1 shock occurred at 21:51 hrs.!)

4/22 2m phone net - W6ZE/IXN checks in RE, RND, FHU, HTK, ZH & TAM, NG7D, TL, XQR, HHC, FYW, VDP, BWH, DBY, & QW. RE, after church Easter Sun., catches the Hollywood Bowl services via VCR. Alex' visiting harmonics depart, & he & XYL get some rest, & RE airs an interesting Newslines! RND works on the RV 'like mad' in preparation for the Club weekend campout. FHU leaves Art class long enuf for a check-in, and HTK's new ant. is doing FB! ZH & TAM let up on DX & DXCC chores long enuf to prepare for the Campout, but receive QSLs frm Senegal, Maui, & Macao. NG7D visits wid family 'on the otherside of the San Fernando Valley' over Easter. And John gets molested by the Easter Bunny at Sunday Brunch!! And John gives a freq. of 146.79, PL 136.5 for Yucca Valley Machine, plus a contact on 80m thru 'the System', to Canada, VE7HIS. TL tells OPs there's only one camping spot left! And Bob still has plenty of tickets left for the PK-232 raffle. XQR, leading the 7 VE pack, champs at the bit to be off to the Campout..Don't forget!..All elements available, says Nancy!! Wid a new version of XQR's word processor installed, Nancy will give 'RF' a new look! HHC gets the old QTH into escrow, so Ken kicks back, enjoys the spring WX, & recovers frm minor surgery. Work keeps VDP away frm the radio last week, but Larry has time to catch a couple of openings on 6m. And DBY concentrates on the 5 wpm code test. QW, after a 'loss of memory', recopies log materials back

Continued on Page 5

Net Notes - Continued from Page 4

into the computer, catching Soviet Georgia & Ubekestan DX on the side. Next is shielded landline cables for the XYL's telephone! BWH takes the day off, gets computer work done, "and now, the Campout", says Bob!

4/23 15m CW net - Acting NC, W6ZE/IXN, checks in HYL, NT, XQR, AB6KE, & RND. NC RND & XYL are already at the JTN Monument Blackrock Campground, near the 6.1 epicenter of last night's quake! NT hears all OPs 599, & when we QSY to 7.150 MHz, NT, HYL, & RND hear all OPs 569 to 599! Next week, we meet on 7.140 MHz for further evaluation of 40m. as the Net freq. RND & XYL get 'shakin' at the Campsite near 4 pm, & agn at 8:30 pm. Bring bk memories of those 'Rock n Roll' days of the 40s, John?! XQR pushes too many buttons on the 'bells & whistles' rig, & forgets to release them in the QSY change frm 15 to 40m. Nancy moves up .8 KHz to eliminate broadcast carrier QRN, releases her buttons, & all is fine!

4/29 15m phone net - Watts Riot III! RND, XQR, COJ & XO check in quickly, and then bk to the 'boob' tube to watch the looting & burning!

4/29 2m phone net - IXN refuses to watch the media-spread riots & checks in XQR, NG7D, FHU/AA, RE, RND, FHN, ESD, & VDP. Wyatt, BPX, shud be coming home frm the convalescent center by the weekend. IXN's dad has a heart attack on Monday & is resting comfortably in the Kaiser Hosp. in Anaheim. NG7D will operate the new class, Class BB, fer FD! FHU, out of class tonite, watches LA burn frm the QTH! RE plays Newline, does home chores, reads ARRL bulletin #37 on FCC enforcement actions & fines! FHN spends all day wid the motorcycle, installing a Knwd 741 wid 2, 220, & 440 bands, fer the upcoming cross-country trip! VDP is sorry to hear of Fr. Moran's death in Nepal, and work keeps Larry frm the radio! ESD watches the LA fiasco, wrks an OP visiting Bangladesh, HA5BUS/S2, on 20m CW, & talks to Rolf & Larry on 2m.

Minutes Board Meeting May 2, 1992

Meeting was called to order at 9:00 AM by Frank Smith, WA6VKZ. Board members absent were Cindy, KC6OPI, Ken Konechy, W6HHC, and Mike Abreu, K6KAA.

Old Business

Field Day - OCARC has received written permission from the base commander of Tustin Air Base to use the base on Field Day. It was moved by Jane, KC6TAM, that no more than \$600.00 be spent for expenses. Motion was seconded by Bob, AF6C. Motion was approved by the Board.

Dave Hollander, W6COJ, has 275 sew on patches with the OCARC. The original amount was to be 300, but OCARC did receive rebate for the 25 that could not be made. Motion was made by Dave, W6COJ, the cost be lowered from \$2.00 to \$1.00 for the patch. Motion was seconded by Carmine, AB6KE. Motion was approved by the Board.

New Business

The copier that was being used by OCARC to print the RF has become non-functional. It was brought up that we need members to volunteer to run copies each month or pay for printing. Bob, AF6C, suggested that OCARC use the copy facilities at Staples as cost is only 1 cent per copy. Discussion was tabled and will be discussed at a later date.

Activities Raffle - Next item to be raffled will be a PK232 and Packet Gold. Tickets are already being sold. There will be a maximum of 400 tickets to be sold.

Campout - This was a success. Lee Evans and Alma, KD6AQO, provided the entertainment and 3 people upgraded during the weekend.

Treasurer's Report

Checking \$ 1,476.62
Savings \$ 1,174.80

Good of the Club

Wyatt, WA6BPX, will be coming home on 5/8/92. Hope to see you soon!!

WB6IXN's father was taken to the hospital last week. Hope everything is going better.

It was mentioned by Nancy, N6XQR, that the EOC has brought up the fact that there are extremely concerned about children at the meeting due to safety issues. Children must be supervised at all times by an adult as there are trucks going in and out and they are not looking for children to be running around the parking lot. Should this situation continue, OCARC is in jeopardy of losing both the meeting place and the liability insurance that we carry.

Meeting was adjourned at 9:40 AM.
Respectfully submitted,
Jane Breller, KC6TAM, Secretary

Editor's Note

by Nancy Bucher, N6XQR

Your RF this month has a somewhat different look. I have upgraded to a later version of the desktop publishing software that I use to publish it. In addition, I have substituted graphics for our letterhead to facilitate copying. I, too, will miss the color, but the letterhead was a quarter of an inch longer than regular paper and a heavier weight than copier paper and caused more wear and tear on copiers.

**No-Code Technician
Weekend Classes
Fountain Valley**

**Bob Gregg, AB6CH
Instructor**

**May 15, 16, 17
June 26, 27, 28
July 24, 25, 26
August 28, 29, 30**

**CALL
(714) 375-0387**

1991 OCARC Financial Statement

Income Received

ARRL Dues	\$164.00
Auction	521.00
Badges	80.00
Donations	345.00
Dues	1,088.00
Family Dues	51.00
Field Day Refund	53.94
Refreshments	29.38
Raffle	795.50
Xmas Dinner	876.95
Yaesu HT Raffle	900.00
Sub-Total	\$4,904.77
Checking Interest	39.22
Savings Interest	54.52
TOTAL	\$4998.51

Expenses Paid

ARRL Dues	\$138.00
Auction Payments	406.80
Awards	63.58
Bank Service Charge	95.88
Donations	220.00
Field Day Food	250.00
Field Day Other	351.34
Newsline Tape	41.01
PO Box Rental	52.50
Raffle Prizes	615.09
Raffle Products	667.95
Refreshments	79.22
RF Postage	332.78
RF Printing	248.39
Supplies	11.96
World Radio	64.65
Xmas Party	1,066.28
TOTAL	\$4705.43

P & L

Total Income	\$4998.51
Total Expenses	-4705.43
Net Profit (Loss)	\$293.08

Account Balances

Year Beginning (1/1/91)	Year Ending (12/31/91)
Checking	Checking
Savings	Savings
TOTAL	TOTAL
\$374.13	\$612.69
1,100.16	1,154.68
\$1,474.29	\$1,767.37

The Innova Power Pack Continued from Page 2

The Innova Power Pack has a current rating of 6.5 amp hours; the Quantum has a rating of 2 amp hours. The Innova can accept up to 10 amps at 12 volts DC in recharging the pack safely, and the manufacturer claims the battery cannot be overcharged. An automotive plug-in type fuse is used to protect the charging, and DC output circuit. Since the claim of not being able to overcharge this battery is stated by Innova, it is suspected by this author that a smart charger circuit is being used to recharge the battery, with a current limiting sensor as part of the recharging circuit. The Innova Power Pack uses a standard cigarette lighter socket as the power receptacle for your devices (negative ground) just like in your car. I'm not sure the Quantum pack works the same way.

The recharger uses a cigarette lighter plug for the power source for the charger. There are several ways that this battery can be recharged. Through the alternator of your car while the engine is running, through a photovoltaic solar panel, or with the optional AC/DC adaptor that Innova puts out, and which at the time of purchase I could not find, and through the use of a home DC power supply. I use a Heathkit SK-101 3 amp power supply with a cigarette lighter socket wired to the +- terminals, and just plug the Innova in when I need a recharge, and I am all set. My unit seems to recharge in less than 3 hours on a 3 ampere rate. The manufacturer states that the battery will recharge in 1 to 3 hours when charged through, the car's cigarette lighter system. And when charged at 12 volts DC at 1000 ma, an 8 to 10 hours recharge cycle period should be expected. Using the home power supply, seems to be about the same effect as charging from the car, if the optional AC/DC adapter is unavailable, and you don't have three hours to run around in your car in drive time.

Since a cigarette lighter socket is used for the DC output on the battery pack, it is a good idea to make up a power cord with a cigarette lighter plug at one end, and two alligator clips on the other. This way the power pack can be used with a variety of 12 volt DC devices, or experimentation. Most devices that are run out of an automobile have the cigarette lighter plug on their power cords already, and all you do is just plug it in. However, be cautious, and check the voltage polarity of the plug first. Some devices are wired in reverse. Be sure to use a heavy duty type cord for your power plug, unless you're consuming very low currents, otherwise your wires could get hot as well as burn through the insulation creating a fire hazard. Yes, even a DC source can create a fire hazard! Lamp zip cord makes good cable for such use.

At the time of this writing, I am aware that some of the members of the OCARC have purchased this battery pack and are quite happy with the results, as I have been. However, at least 3 of us, including the author, have found some strange quirks in operation with the Innova Power Pack, none of them

Continued on Page 7

The Innova Power Pack Continued from Page 6

detrimental to the radio gear itself, but leading to a false indication of the state of the battery charge. The Innova uses three different LED type lights to tell the user what is going on with the pack during use. It also has an on and off switch on the case. A green light indicated that the battery has at least a 60% to 100% charge in it when powered up. If the battery is lower than 60%, then a red LED will light up, indicating a low battery rate, and recharge is necessary. If the RED LED starts blinking, that indicated that the fuse has blown, or there is a system failure, do don't use the battery. When charging the battery, a yellow LED will glow; when the battery is fully charged, the yellow LED will go out. However, I have found, as has WB6IXN, that a steady red LED does not mean the battery is about to go dead, and the fact being, a very false representation of the state of the battery. When I first experienced this effect, a DC volt meter was placed across the power leads, while the battery was in use on my Ten Tec Argonaut 509. I had been using the 509 for about 6 hours on the pack, when the red light came on. However, the radio was still functioning fine, and putting 4 watts RF output on transmit. I continued to use the battery for another 22 hours straight, before the voltage level had dripped to 8 volts DC, and my RF output to 1.5 watts. Conclu-

sion: A red LED is a poor indicator for the state of charge on this battery. A small voltmeter circuit could very easily be built into this pack I think, as a better indicator. Another quirk found was that the red LED will activate if RF is in the near vicinity of the batter pack. My Yaesu FT-470 with the Comet CH600MX antenna will trigger the red LED on. WA6VES and WB6IXN report the same effects. Conclusion: poor shielding of the charger circuit inside of case.

I made a call to Innova and talked to a tech there. They are aware of this problem, but until the unit actually fails during use, they don't seem interested in pursuing the issue, but they are very interested in what the customer thinks and says about the product.

So far, in my own personal use, I have had better than 36 hours continuous running time, using a Regency MX-7000 scanner on this battery pack. 28 hours using a Ten Tec Argonaut 509 in TX and RX operation. 5.5+ hours of continuous use with a Canon E53 8 mm camcorder. I have not yet determined how many hours of straight use I can get out if it using a Yaesu FT-470 Dual Band HT transceiver, nor with a standard 9 volt type transistor radio with the voltage cut down to 9 volts from the battery. Since these type radios use a low milliamp type circuit, it would not be surprising to see the Innova Power Pack run the radio for 3 or 4 days straight easily. The same would be true with an HT in just the

receive mode only, you could expect many days of use from the battery, if only a few hours of use were used each day. I'm sure Southern California Edison will appreciate that — HI. Your wallet might though, if you catch my drift.

So there you have it. My personal opinion of the Power Pack is that it is a good value for the money, and if used wisely will give you years of trouble free operation in your home, car, or out in the field. A larger amp hour rating battery will provide even better service and hours but may not be as convenient or easily transported as the Innova Power Pack is.

Gordon West Radio School, Inc.
presents

Extra Code Class
Dan Fort, AA6LM, Instructor
June 13, 14
Orange County, ICOM

Gordon West Radio School, Inc.
2414 College Dr.
Costa Mesa, CA 92626
(714) 549-5000 HOT LINE 10-4

UNSCRAMBLED HAM

Answers to last month's
Scrambled Ham.
HAM RADIO
FREQUENCY
KENWOOD
MORSE CODE
ANTENNA

Welcome! New Members of OCARC

WT 6 A	Bob	Maller	54 Monticello	Irvine	CA 92714	(714) 551-9572
WA 6 ENI	Jeff	Glassman	4013 E. 15th Street	Long Beach	CA 90804	
KD 6 FYW	Jim	Rauls	8451 Carnagie	Westminster	CA 92683	(714) 893-7877
KD 6 HQP	Linda	Buss	11662 John Ave.	Garden Grove	CA 92640	(714) 534-2995
KD 6 HVR	Greg	Schwartz	P.O. Box 8011	Newport Beach	CA 92658	(714) 960-6060
AB 6 KQ	Linda	Davis	1717 W. 251 St.	Lomita	CA 90717	(310) 784-0979
KI 6 LC	J.P.	Kelly	13741 Carlsbad Dr.	Santa Ana	CA 92705	(714) 832-2771
WA 6 LDI	Phil	Lonzello	5151 Dun Bar # B	Huntington Beach	CA 92649	(714) 840-9066
KC 6 WZQ	Leslie	Karp	1717 W. 251 St.	Lomita	CA 90717	
WD 6 X	Richard	Hammerschlag	1586 W. Baker Street	Costa Mesa	CA 92626	(714) 432-8951
KK 6 YO	Jerry	Davis	1717 W. 251 St.	Lomita	CA 90717	(310) 784-0979
N 6 ZWZ	Joe	Oliver	1027 W. Trinity Lane	Orange	CA 92665	(714) 974-6011
N 6 ZXB	Peggy	Robertson	1027 W. Trinity Lane	Orange	CA 92665	(714) 974-6011
W 6 ZXI	Reg	Thatcher	611 Lido Park Drive, 4F	Newport Beach	CA 92663	(714) 675-3773
CALL SIGN CHANGES:			Bob Schnabel from KC6WWP to KM6TL			
			Linda Davis from KC6VHY to AB6KQ			

CLUB MEETINGS

GENERAL MEETING

May 15th

June 19th

July 17th

BOARD BREAKFAST

June 6th

July 4th

General Meeting is the 3rd Friday of each month at 7:30 PM

Anaheim Emergency Operations Center

909 East Vermont Anaheim, CA

West of 2nd set of railroad tracks.

A big antenna is in front with a red light on top.

Vermont runs east and west between Harbor and State College

Vermont is north of Ball and South of Lincoln

Board Meeting is the 1st Saturday of each month at 8:00 AM

Denny's -- Members and Visitors are welcome

2314 E. Seventeenth Street Santa Ana, CA (714) 543-0872

2nd building west of the 55 Freeway

CLUB NETS

<u>BAND</u>	<u>MODE</u>	<u>DAY</u>	<u>LOCAL TIME</u>	<u>FREQ. MHz</u>	<u>NET CONTROL</u>
15 Meters	SSB	Wed	8:00 PM	21.375*	AF6C
2 Meters	FM	Wed	8:30 PM	146.550 simplex	WB6IXN
15 Meters	CW	Thur	8:00 PM	21.175*	WA6RND

(Listen for W6ZE, Net Control) *Plus or minus QRM

ORANGE COUNTY AMATEUR RADIO CLUB, INC.

P.O. Box 3454

TUSTIN, CA 92681



First Class Mail

**Time-Dated Material.
Please Rush!!**