



# RF



## ORANGE COUNTY AMATEUR RADIO CLUB, INC.

VOL. XLV NO. 11

P.O. BOX 3454, TUSTIN, CA 92781-3454

NOVEMBER 2004

### THE PREZ SEZ:



One last word urging every member to attend the November monthly meeting and vote. If we are to have an interesting and productive 2005 we must all contribute what we can, when we can, and this includes voting.

December is our annual Christmas party, to be held at Carrow's, in Orange on Chapman, not too far from the 55 freeway. Check out our web site [or page 7 - Ed.] for details. We will be ordering directly and individually off of the menu. We will also have a raffle for several very good prizes, and a special prize for the women!

73,  
Steve  
N1AB



### Silent Key

Charles West, KB6TWA  
May 1920 – October 2004

With sadness I must once again report the passing of a fellow club member. Charles West, KB6TWA, passed away on October 8th. Those who remember Charles from the meetings and nets know we've lost a dear friend. On September 15th he checked into the 10 meter net and reported that while recovering from a heart attack in late June doctors were showing concern about an aneurysm that had been becoming larger. Charles entered the hospital to have the aneurysm repaired with a stint, but never recovered from the surgery.

Charles became a licensed General Class ham in 1987, upgrading to Advanced Class in the 1990s. He was a frequent check-in on the Wednesday 10 and 2 meter club nets. Charles was a valuable contributor discussing numerous topics, including his favorites: photography and gardening (his tomatoes

See: **Charles** - on Page 3

### NOVEMBER PROGRAM:

The November meeting will feature Mick Stwertnik, KB6JVT of NCG. NCG is the importer of **Comet, Maldol and Diawa** ham radio products. Mick will be bringing some products to demonstrate, including no-holes-to-drill mounts and the new Maldol HF/VHF/UHF vertical that is under nine feet tall.

This is also the Election meeting for next year's club officers. Be sure to attend so you won't miss this interesting program and the club elections. See page 9 for slate.

**The next regular meeting is:**

**Friday, Nov. 19th 2004  
@ 7:00 PM**

We will be meeting on the 2nd floor in the east bldg.

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**Next Club Breakfast &  
Open Board Meeting  
Sat. Dec. 4th 2004**

**The Annual OCARC**

## Holiday Dinner

**Will be held on SUNDAY December 5th, 2004**

**at Carrow's Restaurant**

**2810 E. Chapman Ave., Orange, CA**

**at 6:00 PM**

*Details on page 7, and on our web site at: <http://www.w6ze.org>*

**THE ORANGE COUNTY  
AMATEUR RADIO CLUB,  
INC.**

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**Monthly Events:**

**General Meeting:**

Third Friday of the Month  
At 7:00 PM

**American Red Cross**

601 N. Golden Circle Dr.  
(near Tustin Ave. & 4th St)  
Santa Ana, CA

**Club Breakfast:**

First Saturday of the  
month at 8:00 AM

**CowGirl's Cafe, Too**

2601S. Harbor Blvd.  
(just south of Warner)  
Santa Ana, CA

**Club Nets (Listen for W6ZE):**

7.086 MHz CW **OCWN**  
Sun - 9:00 AM - 10:00 AM  
Rick KF6UEB, Net Cntl.

28.375± MHz SSB  
Wed - 7:30 PM - 8:30 PM  
Bob AF6C, Net Control

146.55 MHz Simplex FM  
Wed - 8:30 PM - 9:30 PM  
Bob, WB6IXN, Net Control

**VISIT OUR WEB SITE**

<http://www.w6ze.org>

for up-to-the-minute club information, the latest membership rosters, special activities, back issues of **RF**, links to ham-related sites, vendors and manufacturers, pictures of club events and much much more.

**Club Dues:**

Regular Members ..... \$20  
Family Members\* ..... \$10  
Teenage Members ..... \$10  
Club Badge\*\* ..... \$3

Dues run from January thru December & are prorated for new members.

\*Additional members in the family of a regular member pay the family rate up to \$30 per family.

\*\*There is a \$1 charge if you'd like to have your badge mailed to you.

## BPL - FAST TRAIN HEADED STRAIGHT FOR HAM RADIO

On Oct. 14, the FCC signed an order allowing "fast Internet access" to be achieved using unshielded electrical power lines in order to provide this service to commercial and residential customers using a concept called *Broadband over Power Lines* (BPL).

### **How BPL Works:**

Usually, high-speed Internet access comes to homes through one of three ways: a telephone line for DSL subscribers, a coaxial cable for cable modem subscribers, or a satellite dish (such as Direct-PC) for satellite-Internet subscribers. But, an emerging technology known as BPL may soon offer a fourth way into homes, channeling high-speed data through an ordinary electrical power outlet.

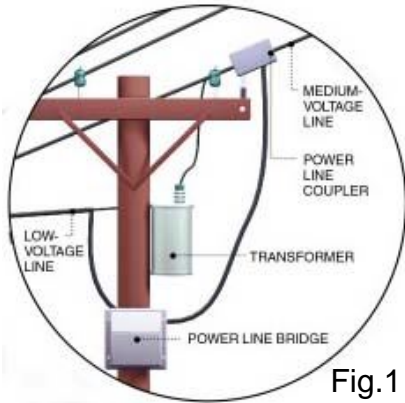


Fig.1

Suppliers of BPL equipment and operators of BPL services, such as a company called Current Communications Group,

<http://www.currentgroup.com>,

will partner with local electrical power companies, such as Southern California Edison, to provide BPL right to your neighbor's house. The BPL operators install RF amplifiers and *power line bridges* along the power lines infrastructure to carry the Internet signals right along with 60 Hz. current on the unshielded power wires. See Figure 1 for typical BPL power line equipment. The Internet information will be using the RF frequencies between 2.0 MHz and 80 MHz in a seemingly "continuous buzz" known

See: **BPL** on Page 6

## OCARC WEB SITE HAS BEEN MOVED

By: Ken Konechy, W6HHC

The <http://www.w6ze.org> OCARC WEB site has been moved to a new web-hosting company, *1and1.com*, from our old web-host company, *XO.com*.

Ken - W6HHC, the OCARC WEBmaster, reports that the transition seems to have gone "seamlessly" from the eyes of OCARC users. As of 2004-11-01, every time you enter the URL for [www.w6ze.org](http://www.w6ze.org) you end up at the *1and1.com* server, located in Pennsylvania. Really, the only way you can tell the difference is that at the bottom of the front page, Ken has added the words...

*"This page last updated on 02-November, 2004 by Ken W6HHC at [1and1.com](http://1and1.com)".*

This change over of the web-hosts allows the club to get 20 times as much disk space (2 GB instead of 100 MB) for one-half of the monthly charges. And Ken reports that the Tech Support help for the new host-company appears to be very good, too. Technically, the OCARC also received a free "second domain" by signing up with *1and1.com*. The second domain is OCARC-HAM.org. The club currently has no immediate plans for this URL, but the price was right.

From a historical perspective, this is the sixth web-host that has been used by OCARC. The first location was set up by ex-member John Meacham (now KJ6TK) who used the "Geo-Cities" servers to set-up the first WEB pages for OCARC around 1995/1996. Then in 1997, ex-member Phil Andersen - N7PA, encouraged his son, a computer-science student, to write some fresh HTML pages that were hosted on Phil's own host, *www.BlackHawkUSA.com/OCARC*. Finally in 1998, the OCARC got its own domain, *W6ZE.org*, and Ken W6HHC volunteered to be WEBmaster for OCARC and uploaded more pages to a new web-host company, *9net-*

Charles - from Page 1

and fruit trees were often a topic for discussion). Last year, when Charles was experiencing an antenna problem, Ken - W6HHC helped him fix it. During the visit the conversation changed to digital photography and Charles showed Ken his new Nikon Digital camera. Ken was so impressed he bought one too and they continued comparing notes on the nets and in person.

Charles was 84 years young. Though he had some health setbacks in recent years, he was active and was able to enjoy his hobbies to the end.

The hearts of the club members go out to Charles' family and especially to his wife Louise who often accompanied him to club meetings. Louise is relocating to Florida (near Tampa) on about Nov. 1st where the family has relatives.

Editor

*Ave.com*. Reliability problems forced OCARC to move to *Concentric Networks* about two years later. Again reliability issues and disk space constraints forced the club to move to *XO.com* two years later in late 2002. And finally, the excessive cost of additional disk space at *XO.com* lead Ken to recommend this move to the leader in European web-hosting who is now making a big impact in US-web-hosting: *1and1.com*.

An "unsung hero" of the OCARC WEB site material has been Bob-AF6C, who serves as the Assistant WEBmaster. Bob provides backup resources, and manages the HAM-Related-Suppliers links, helps spread out the workload, and provides immediate support whenever the WEBmaster is busy or unavailable. If any one has any problems or even any questions about the new web-host move, contact Ken at [w6hhc@w6ze.org](mailto:w6hhc@w6ze.org) or Bob at [af6c@w6ze.org](mailto:af6c@w6ze.org).



**Current Sources:**

We're moving along on our deluxe code practice oscillator. The phase shift oscillator is up and running at 1,000 Hz, and you know how to change the frequency if you prefer a different tone. We also know how to buffer the oscillator so it will continue to oscillate when a load is applied. Now all we need to do is design a way to key the oscillator, adjust the volume and add an amplifier capable of driving a speaker. The design I've chosen for the amplifier is rather a new circuit that was developed after the transistor became popular. One of the most expensive and bulky parts of tube audio amplifiers was the output transformer. This continued to be true in early solid-state equipment that used a pair of similar transistors in push-pull driving a speaker through an output transformer. Then a clever design was introduced that utilized *complementary* transistors, acting as emitter followers and a *current-mirror*. Complementary transistors are transistors that are identical in properties except for polarity; one is type NPN and the other is type PNP. The use of a current-mirror is why we're diverging a bit this month to discuss current sources and the current mirror.

We are familiar with batteries and power supplies (voltage sources) that put out a constant voltage. If you shunt the output with a resistor, (Figure 1A) the current  $I$  flowing through the resistor will be governed by Ohm's law:

$$I = \frac{V}{R}$$

where  $V$  is the voltage source's voltage and  $R$  is the resistor's value in Ohms. Changing the resistor changes the current flowing through the circuit. However, the voltage across the resistor stays constant (within the capability of the voltage source).

A *constant current* source is shown in Figure 1B. Its symbol is two overlapping circles, As its name implies, it puts out a constant current. If you shunt it with a resistor, the voltage across the resistor will also be governed by Ohm's law:

$$V = I \times R$$

where  $I$  is the constant current source's value and  $R$  is the resistor's value in Ohms.

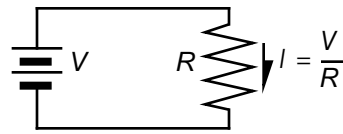


Fig. 1A: A Constant Voltage Source

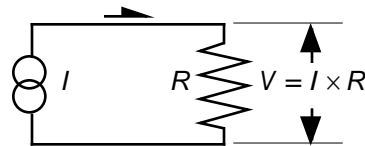


Fig. 1B: A Constant Current Source

When you place too low of a resistance or short across a voltage source, excessive current flows, the voltage drops, and unless protection is provided, smoke often follows! Obviously batteries and power supplies were not designed for such a condition. A similar thing happens with a constant current source when its output is left open or the resistance across it is very high. Ideally, in this case the voltage rises to a very high level. Practically, however, current sources have a *head voltage* which is the maximum that they can output. Above that, the current source loses its ability to maintain the constant current. What this says is that just as a power supply is rated for a maximum current, a constant current source is rated for a maximum voltage.

A well designed battery or voltage source has a low impedance (series resistance). This is the resistance that causes a power supply's voltage to drop as more current is drawn. A current source is just the opposite. It has a high impedance (series resistance) that acts to keep

the current constant with changes in voltage.

**Some Practical Circuits:**

Figure 2A is a circuit of a simple constant current source used in older vacuum tube equipment where high voltages are available. It is just a voltage source  $V_S$  with a large series resistor  $R_S$ . If the circuit resistance  $R_C$  is small compared with  $R_S$ , the current change with changing  $R_C$  will be small too, and the current will remain nearly constant. This scheme is often used in biasing of DC vacuum tube amplifiers, and developing linear sawtooth waves for oscilloscopes.

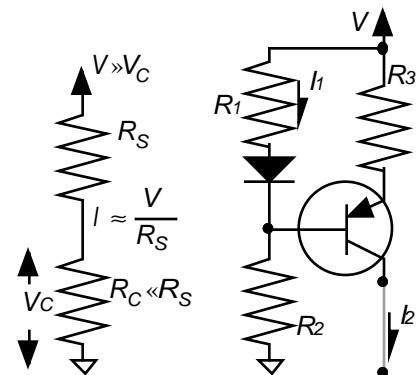


Fig. 2A Constant Current Circuits

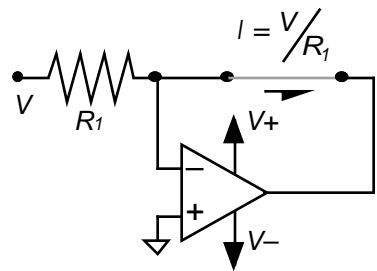


Fig. 2C: Op-Amp Current Source

A more complicated current source is shown in Figure 2B. Assuming that the voltage drop across the diode and base-emitter junction of the transistor  $V_{BE}$  are equal, then the voltage across  $R_1$  and  $R_3$  must be equal. The current  $I_1$  through  $R_1$  is:

$$I_1 = \frac{V - V_{BE}}{\left( R_1 + R_2 + \frac{R_2}{\beta} \right)} \approx \frac{V}{(R_1 + R_2)}$$

If  $\beta$  is large, we can ignore the term with  $\beta$  in it; also if  $V \gg V_{BE}$  we can also ignore  $V_{BE}$  as shown above. (For silicon transistors,  $V_{BE}$  is on the order of 0.6 to 0.7 volts.) Since we want to keep the current source's head voltage as high as possible  $R_1$  and  $R_3$  should be chosen to drop only a small part of the source voltage (but, for stability, large with respect to expected changes in the transistor's base-emitter voltage drop with temperature). Since the voltage across  $R_1$  and  $R_3$  are equal, the following ratio holds:

$$V_{R1} = I_1 \times R_1 = V_{R3} = I_2 \times R_3$$

Substituting in the value for  $I_1$  gives:

$$I_2 = \left( \frac{V - V_{BE}}{R_1 + R_2 + \frac{R_2}{\beta}} \right) \times \frac{R_1}{R_3}$$

$$\approx \frac{V}{(R_1 + R_2)} \times \frac{R_1}{R_3}$$

This is a neat little circuit if you need a constant current. It is often used to produce a voltage that increases (ramps) at a constant value by using the constant current to linearly charge a capacitor. It is easy to breadboard and play with.

### Current Devices:

A simpler (but more expensive) way to produce a constant current is to use one of the solid-state devices on the market. Operational amplifiers (like the 741 and my favorite the TL080 series) make really simple and accurate current sources that are bipolar. Figure 2C shows the simple circuit. Current regulator diodes are also available at various specified currents. The 1N5283 – 1N5314 series contain 32 types with nominal current values of 220 $\mu$ A to 2.7mA. They will act as current regulators up to a maximum voltage of 100 V. Figure 3 shows the schematic symbol for a current diode which is similar to a normal diode except the triangle is

replaced with a circle. As with a normal diode, the line identifies the cathode.



Fig. 3: Symbol for a Current Diode

### A Transistor as a Diode:

While discussing the circuit of Figure 2B, I made the assumption that: *the that the voltage drop across the diode and base-emitter junction of the transistor  $V_{BE}$  are equal.* Inside an integrated circuit (IC) this is typically true; the materials and construction are the same, and the base-emitter junctions are close together and follow each other in temperature. However, with discrete components this assumption may not be true.

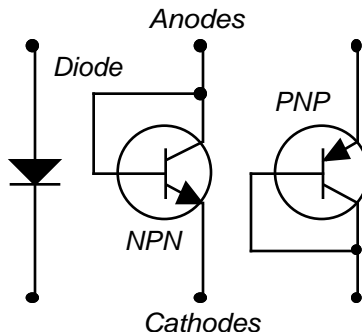


Fig. 4: Transistors Can Be Wired as Diodes

Diodes and transistors are manufactured with different junction areas and material properties. Unless a well matched junction is chosen, the assumption will be a poor one. Here is a way to make the match closer. Instead of a diode, use a transistor connected as shown in Figure 4. Choose an identical transistor (preferably one from the same manufacturer and even better from the same batch). You now have junctions with closely similar characters. There is one additional thing you need to compensate for. The base-emitter junction voltage changes with temperature. Keep the components close in temperature and don't make one dissipate a lot more power than the other. In some critical circuits these components are mounted

physically close together on a heat sink.

### The Current Mirror:

Figure 5A shows a basic circuit called a *Current Mirror*. By adjusting  $R$  you can set the current  $I_1$ . The current  $I_C$  flowing in the collector of the transistor  $Q_2$ , will closely mirror  $I_1$  (That is  $I_C$  and  $I_1$  will be nearly the same.) This circuit is used in most analog Integrated Circuits to bias stages. For example, the 741 operational amplifier has five current mirrors as part of its design.

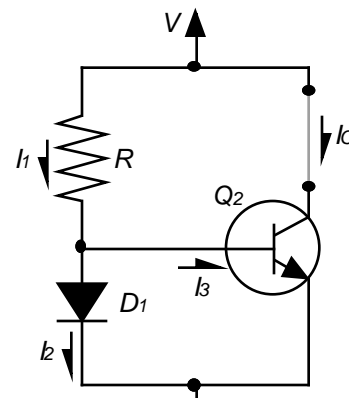


Fig. 5A: The Basic Current Mirror Circuit

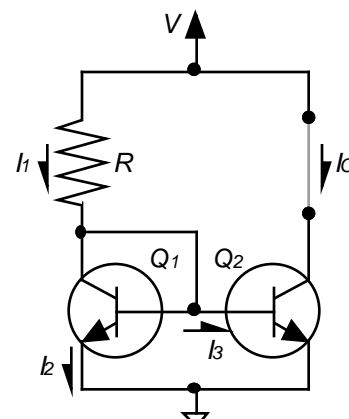


Fig. 5B: The Modified Current Mirror Circuit

For the current mirror to work the junction of diode  $D_1$  and the base-emitter junction of transistor  $Q_2$ , must have almost identical properties [See side bar]. If this is the case then the diode current  $I_2$  and the transistor collector current  $I_C$

See: **Current** on Page 7

**BPL** from Page 3

as "spread spectrum" modulation. In your neighbor's house, a BPL modem is simply plugged into any electrical power outlet (see Figure 2) to convert the Internet signals onto an Ethernet cable for connecting to the PC.



Fig. 2

Source: Current Communications

### What's the Problem?

Despite extensive measurements and testing reports presented by the ARRL to the FCC during trial-installations of BPL during the last year, the FCC did not reduce the signal emissions allowed by BPL over the unshielded power lines. The ARRL has shown that the BPL emitted RF power levels allowed are 30  $\mu\text{V}/\text{m}$  at 30 meters in the 1.705-30.0 MHz region of the spectrum. For example: this translates to 338  $\mu\text{V}$  across 50 ohms using an 80M dipole that will result in a S9+16 dB signal that is clearly harmful interference to typical amateur communications!

The ARRL web site has plenty of information about the potential impact of BPL and results of studies at:

<http://www.arrl.org/tis/info/HTML/plc/>

Also on this ARRL WEB page are links to "video clips" where you can hear and watch the S-meter" as ham operators drive into neighborhoods where test BPL trials have been conducted. The sounds and the pictures are disheartening!!

The head of the FCC, Chairman Michael Powell acknowledged concerns from the American Radio Relay League and other ham radio

operators, but he called the FCC's adoption of the BPL rules a "historic day" for the future of U.S. broadband services. Powell called amateur radio an "important resource" in the U.S. communication system and promised that the FCC would pay attention to interference issues.

ARRL CEO David Sumner, K1ZZ, has concerns. The FCC R&O, he said, "shifts the burden to licensed operators to react to interference rather than adopting rules to prevent interference from occurring." The R&O advises locating "sensitive receiver antennas" as far as practically possible from power lines. Additionally, the FCC admonished ARRL that in cases where its members experience RF noise, "such noise can often be avoided by carefully locating their antennas." Reacted Sumner: "If a BPL system operator wants to meet its obligation by picking up all of the costs of relocating a licensee's antenna, it's free to make the offer."

If interference occurs, the new Part 15 rules will require BPL system operators to employ "interference avoidance techniques" such as "frequency band selection, notching, or judicious device placement." Notches would have to be at least 20 dB--slightly more than 3 S units--below applicable Part 15 limits on HF and at least 10 dB below Part 15 limits on VHF--not much protection for weaker signals common in HF work.

Beyond the issue of interference to radio amateurs, Sumner said BPL deployment holds the potential to simply degrade and pollute the radio spectrum for all radio users in exchange for "a short-term commercial benefit."

Beyond Ham radio HF and VHF bands, there are many other short-wave services and users that will be affected. BPL could affect:

- Emergency management
- National Guard
- US Coast Guard

- U.S. Military
- Fire Departments
- Law Enforcement
- CAP
- FAA
- FEMA
- NASA
- SWL
- TV stations
- Amateur radio
- CB radio
- Family Radio Service

ARRL's Dave Sumner, K1ZZ in the February 2004 QST editorial said: "Why they persist in denying plain facts – and why they think they can get away with it – is one of the mysteries of the whole BPL scenario."

### What Lies Ahead?

Well, I don't have a crystal ball; so I really don't know. But, I do know the power line companies have all jumped on the band wagon since the FCC ruling to announce their plans to provide BPL services, soon. And I do know that the facts I have read about the interference-potential to Ham radio are discouraging. Maybe, this really could be the beginning-of-the-end for low band Ham radio long distance communications??

I think that the best hope for Ham radio lies with fully supporting the ARRL in their defense of this problem. A united ARRL organization can do much, much more than any one individual Ham or even one individual Ham Radio Club.

de: Ken – W6HHC

**Note:** The figures are courtesy of *Current Communications Group*.

### CLUB DONATING TO FIGHT BPL

The OCARC Board has agreed to send a donation to fight BPL. Also members will be asked to make donations at the November meeting and December dinner. If you wish to donate, the club will match your donations up to \$250 total. (The club will put in \$100 minimum) The donations will go to the ARRL Spectrum Protection Fund.

# Holiday Dinner

Will be held on **SUNDAY December 5th, 2004**  
at **Carrow's Restaurant**  
**2810 E. Chapman Ave., Orange, CA**  
at **6:00 PM**

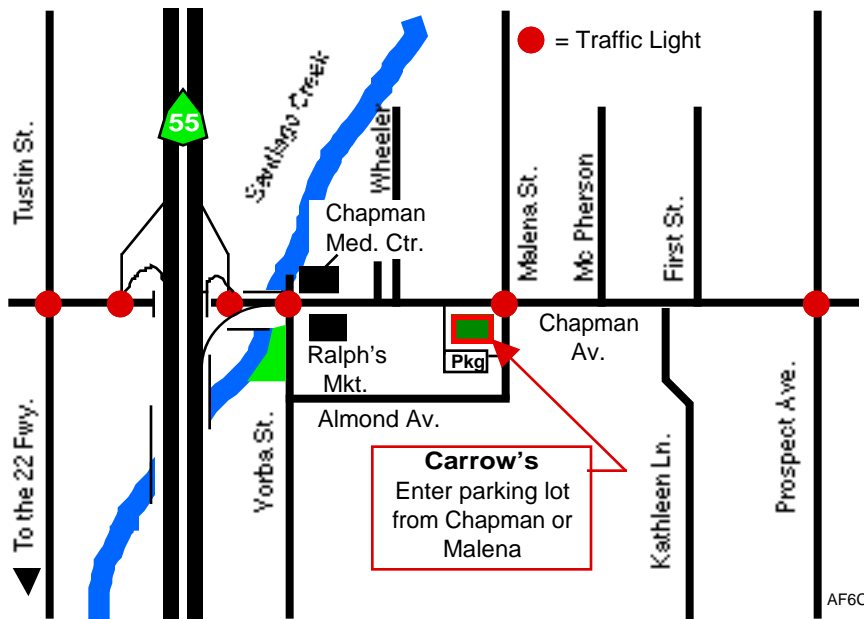


The Orange County Amateur Radio Club will be holding its Annual Holiday Dinner on Sunday December 5th at 6:00PM at Carrow's Restaurant, 2810 E. Chapman Ave. in the city of Orange.

Carrow's is located a couple of blocks east of the 55 Freeway. It is on the southwest corner of Chapman Ave. at Malena St. (See Map). Carrow's phone # is (714) 639-1297. There is plenty of parking in the rear.

We will be eating in the private room. Orders will be taken from the regular dinner menu, and separate checks will be provided. Dinner prices are on the order of \$8 to \$16. Beer and wine are available. A copy of the menu should be available on our web site by early November, though prices are subject to change.

Dress is informal, and Holiday attire is encouraged. Please come and enjoy the club's social event of the year.



### Driving Directions:

**From the 22 Fwy:** Exit at Tustin St. [or continue to the 55 Fwy northbound and use the 55 instructions.] Go north on Tustin to Chapman Av. and turn right. Carrow's is on your right one light beyond Yorba Street. (4 lights total).

**From the 55 Fwy:** Exit at Chapman Av. eastbound. Carrow's is on your right one light beyond Yorba Street. **Drive Safely!**

**Current:** from Page 5

are identical:

$$I_C = I_2$$

At the junction of the resistor and the diode it is obvious that:

$$I_1 = I_2 + I_3$$

or:

$$I_1 = I_C + I_3$$

Since the base current  $I_3$  is small compared with  $I_C$

$$I_C \approx I_1$$

The current  $I_1$  is set by  $R$  as:

$$I_1 = \frac{V - V_{BE}}{R}$$

And, if  $V$  is much greater than  $V_{BE}$

$$I_1 = \frac{V}{R}$$

Since it may be difficult to find a diode with the right properties, a transistor  $Q_1$ , identical to  $Q_2$ , is substituted for  $D_1$  as shown in Figure 5B.

In the next TechTalk column we will be using current mirrors to develop a class B amplifier that will drive a small speaker from our oscillator's signal. We will also briefly discuss the difference between class A, AB, B and C amplifiers. Since class D amplifiers and above are digital in design, we'll skip discussing them.

73 de AF6C

### Matching Characteristics

A common specification of a transistor is its *Transfer Characteristics curve*: A graph of collector current vs. base-to-emitter voltage. The diode has a similar specification that is called its *Forward Characteristics curve*. A graph of diode current vs. anode-cathode voltage. Both of the curves are given for multiple temperatures. These curves must be reasonably close for a current mirror to work well. More on these characteristics may be found in any recent ARRL Handbook.

Bob, AF6C

**Auction 2004 A Success:**

After a few years of struggling with the OCARC Auction, hard working members helped us get it right; and we had a successful OCARC Auction! In 2002, the Auction had lots of buyers, but almost no sellers. In 2003, the Auction had lots of sellers, but not enough buyers. In 2004 we had lots of sellers, and buyers; and we had lots of fun! Members got the word out about the OCARC Auction over nets, over the air, through advertising and through e-mail. Great radio equipment was bought and sold to the delight of buyers and sellers alike. The net result of the 2004 Auction was that over \$270 was added to the OCARC treasury, Here's the totals:



**A**



**B**

Total Receipts: \$1,269.50  
 Total payout: \$999.00  
 Net profit: \$270.50  
 (Donations \$142.50 - include in net profit figure)

Credit for a successful auction goes to all the buyers and sellers, all and those who helped advertise. Credit also goes to Larry, K6LDC; Ken, W6HHC; Bob, KD6BWH; Larry, K6VDP and Bob, AF6C for all the work they did to help make the "operations side" of the Auction successful.

**Auction Photos** (by AF6C):

(These and additional auction photos will be posted on our web site in higher resolution after the Nov. meeting.)

**A:** Ken - W6HHC and Bob KD6BWH handled the registration, recording and finances for the auction:

**B:** Auctioneers Larry - K6LDC (L) and Larry - K6VDP put another radio on the block.

**C:** The room begins to fill with bidders as President Steve - N1AB conducts a one-minute business meeting (no kidding - one minute!)

**D:** Bidders checkout the items that are up for bid.

**E:** Fried - WA6WZO marks items he brought for auction while Kristin - K6PEQ, Larry - K6VDP and Rich - KE6WWK (partially hidden) look for bargains.

de Ken W6HHC & Bob AF6C



**C**



**D**



**E**



## 2005 Election Slate:

### **President:**

Ken Konechy, W6HHC

### **Vice President:**

Willie Peloquin, N8WP

### **Treasurer:**

Cheryl Peloquin, KG6KTT

### **Secretary:**

Rich Helmick, KE6WWK

### **Membership:**

Cindy Hughes, KC6OPI

### **Technical:**

Ken Reilly, N6CCE

### **Publicity:** (Vote for one)

Bob Eckweiler, AF6C

Matt McKenzie, K6LNK

### **Activities:**

Kristin Dankert, K6PEQ

### **Member @ Large:** (Vote for one)

Dan Dankert, N6PEQ

Billy Hall, N6EDY

Frank Smith, WA6VKZ

### **Member @ Large:** (Automatic\*)

Steve Brody, N1AB

A special thanks is due Kristin for emailing and calling all the members to put together this slate of officers.

\* The Past President and VP are automatically put in the M.A.L. positions if they don't take another spot on the board.

**Note:** Any member is **still welcome** to run for a board position. Nominations will remain open until just before the vote. Please speak up at the meeting or contact Kristin, K6PEQ.

## **UPCOMING RAFFLE PRIZES**

Kristin, K6PEQ is acting Activities Chairman while Carl is out of town. She has arranged for some great prizes for our November raffle and for the December Dinner raffle. Be sure to attend both meetings and to buy lots of raffle tickets! As a special incentive, each XYL coming to the December dinner will receive one free raffle ticket for a special

## **RADIO SUPPORT NEEDED FOR EVENTS - Nov. & Dec.**

I have committed myself to supporting two races in the next 30 days and I'm looking for volunteers. On Saturday the 20th of November at 8 am. in the Cleveland National Forest I would like 5 or 6 volunteers. The race should be over by 3 pm. It is a very scenic location but three spots need either 4-wheel drive or a good pick-up truck.

Also on Sunday the 5th of Dec. starting at Fashion Island and finishing at Back Bay Dr. and Jamboree Rd. is the next Orange County Marathon and 5K. It will run from 7 am. to about 3 pm. and I'm looking for ten or twelve people for that event.

T-shirts and munchies are among the rewards for working these events. If you can help with either or both of these events please call me at (949) 859-3868 or send me an e-mail at ad6oi@cox.net.

Thank You.

Heiko (AD6OI)

XYL Raffle prize!

### **Here's the Current Prize List:**

#### **November:**

- 2005/2006 CQ Amateur Radio Calendar
- QRZ Ham Radio Callsign Database (**donated by HRO**)
- Atomic Alarm Clock with Indoor Temperature
- Pryme RD-98 VHF/UHF Dual-band High Gain Antenna
- Rip Tie Gecko Tape
- Ham Radio Map

#### **December: (Holiday Dinner)**

- 2005/2006 CQ Radio Classics Calendar
- Ironhorse Tri-Band Antenna Magnet Mount
- J-ames Pole Antenna – 2M/440 Roll-Up
- Grundig FR200 Emergency Crank Radio
- Pryme Handheld

## **Recent Board Meetings:**

### **November 6th Board Meeting:**

President Steve N1AB, called the meeting to order at 8:40 AM.

**Old Business:** The club Christmas party is scheduled for Sunday evening December 5, 2004. Meals will be ordered from the regular menu and separate checks will be given. There will be a raffle after dinner and tickets for the raffle will be available only to those who attend. [See *Upcoming Raffle Prizes* on this page - Ed.]

The election for officers will be held at the November meeting. [See the *2005 Election Slate* on this page - Ed.] The committee reports, "All of the members from the roster were e-mailed and/or called. Any other members are welcome to run".

Ken, W6HHC reported the new web site is up and running. The cost is \$9.90 a month. Bob, AF6C said possibly the club officers could have club e-mail addresses.

Steve, N1AB said the ARRL is asking for donations for spectrum defense and to fight Broadband over Power Lines. A motion was made by Ken, W6HHC and modified by Bob, AF6C to match club members donations to a maximum of \$250 (with the club donating a minimum of \$100.) The motion was seconded by Lowell KQ6JD and passed.

It was discussed that the ARRL is now refunding a "monetary reward" to clubs whose member join or renew through the club. It was agreed that the club would actively pursue and promote this.

A correspondence was read from Heiko Peschel, AD6OI asking our club for volunteers to support communications for two upcoming races [see his letter on page 9 - Ed.]

Ken, W6HHC brought up the yearly "Good of the Club" award. Steve, N1AB is accepting nominations from the board for this award.

Ken, W6HHC brought up the fact

**See: Board Minutes** on Page 10

## October Meeting Minutes:

### October 15, 2004 (Auction)

President Steve - N1AB, called the meeting to order at 7:03 PM specifically to appoint a nominating chairman. Kristin, K6PEQ, volunteered. Board members absent were: Publicity - K6LNX, and Technical - WA6PFA (surgery). Auctioneer Larry, K6LDC; assisted by Larry, K6VDP and Bob, AF6C, then conducted the Auction. There were 28 in attendance.

Respectfully Submitted  
Rich Helmick - KE6WWK  
Secretary



### Board Minutes from Page 9

that the club constitution stipulates the board to discuss and set club dues in the month of November. Discussion resulted in Bob AF6C making a motion that club dues remain the same for the next year. Ken, W6HHC seconded the motion and the motion passed.

The meeting was adjourned at 9:15 AM. Eighteen members and visitors attended; Board Members absent were: Bob Buss KD6BWH, Matt K6LNX, Tom, WA6PFA and Carl, WA6BSV.

Respectfully submitted,  
Rich, KE6WWK, Secretary

### October 9th Board Meeting

In October the board met (a week late due to a RACES drill) at Polly's Pies on Tustin Ave. in Orange (just south of the Village Mall on the east side of the street.) Only five board members were present. Absent were: Rich, KE6WWK (travel); Matt, K6LNX; Tom, WA6PFA

(surgery) Carl, WA6BSV and Larry, K6LDC (business) so an informal meeting was conducted.

Topics discussed were:

- The upcoming auction and getting flyers out to HRO and notifying people on local nets.
- The upcoming elections and the need for an election committee.
- Printing of the current RF.
- Who will be editor for RF next year? The current plan is to rotate the duty among members on a monthly basis by volunteers. Bob, AF6C and Ken, W6HHC, who have taken turns editing the paper for the past four years, will assist these volunteers. Bob, AF6C commented that it is a rewarding job.
- Results and lessons learned during COARs participation in the past week's RACES drill.

The informal meeting ended about 9:20 after an enjoyable breakfast.

Submitted by Bob, AF6C  
for Rich, KE6WWK

**ORANGE COUNTY AMATEUR RADIO CLUB, INC**  
**P.O. BOX 3454**  
**TUSTIN, CA 92781-3454**

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