Cathay Newsletter
September 2006

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Mission: The Cathay Amateur Radio Club is basically an active social club of Ham Radio Operators and their spouses

Monday Night Net Time: 9PM PST Frequency: 146.67MHz -600KHz PL85.4 and 442.70 +5MHz PL 173.8 The repeaters are linked. The Monday night net is the best way to find out the latest club news. All check–ins are welcome

President's Message Tony Halog – KR6EG

Musings from the President's shack

My wife Connie KF6WEA and I were at a radio club meeting earlier this year, and one of the routine things that the club does is to let visitors introduce themselves. Usually it's just a name and a call sign; sometimes they include their home town and a bit more info. This particular time, a fellow stood up, gave his name and said he didn't have a license; he was a student and was doing research for a paper on older technology. Older technology? Granted, amateur radio has been around for a while, but don't check for rigor mortis quite yet. Maybe the obsolescence of amateur radio wasn't the perspective this chap wanted to portray, but that was my knee-jerk reaction to his given reason for attendance. I understand that everyone has their own point of view, but I can only hope this student was still in the embryonic phase of his research. Allow me to inject at this point that in my personal opinion, I'm still a newbie in amateur radio, and that's because my license hasn't reached double-digits yet. Very well, I'll concede that amateur radio has some years since its inception, but I maintain there's quite a lot of life remaining.

Let's leave the majority of the pioneering aside and review a few incidents that prove the currency and efficacy of amateur radio. September 11. The Indonesian tsunamis. Hurricane Katrina (among others). Cellphones weren't immediately available. Landlines were down. Amateur radio was there. What's that you say? That's all amateur radio can do? No more useful research and development? Can't keep up with the times? Well, somebody check the dates and educate me. I think EchoLink and IRLP (Internet Radio Linking Project) were around before VOIP (Voice Over Internet Protocol). What's VOIP? Have you heard of Skype and similar products? Software that provides free or low-cost long-distance telephone access through the Internet? Amateur radio satellites continue to be viable payloads in government and privately funded space programs. Did you know that amateur radio operators are presently participating in tracking migratory patterns of many species; and they have been requested to do so because there aren't enough government resources for the job? Amateur radio isn't dead or dying. Most people just don't know about our great hobby. We need more media exposure. We need efficient public relations representatives. We need to promote our enjoyment and enthusiasm. The advent of the Internet and video games took the attention of many of our youth. But that doesn't mean that we can't be pro-active with the next generation of amateur radio operators.

"Hey, Uncle Tony, that's an awfully big cellphone."
"That's not a cellphone, buddy. It's a two-way radio. Want to learn a little about it?"

73, Tony Halog - KR6EG

Field Day 2006

This year's annual Field Day was held at George's and Hetty's in the Oakland Hills. The weather cooperated and it was not too hot. Without Bob Lai and Nelson Doon, there was little interest in operating but a lot of interest in socializing and catching up with what people were doing. But we have known all along that the Cathay Radio Club is known for more of its socializing than its radio operating skills. Leang Yee K6LJF came all the way from Petaluma. There was plenty of food, enough for twice the amount of people that came. The picture below only shows the main dishes. There was another full table of desserts and drinks. If this is any indication of what we are going to have at the potluck picnic on the 23rd of September, it is going to be a culinary dream.

The Grand Prize went to Tony Halog KR6EG. See what luck brings you when you are the President. As my memory recalls, Tony and Connie have won an Alinco DJ196 handie talkie, an Icom IC-207H dual band mobile, and now a Yaesu FT1802. I think that may be a record. Patience is really a virtue. He had a choice of a Motorola GM300 16 channel UHF mobile, a 17 inch LCD monitor, or a Yaesu FT-1802 50 watt mobile. He chose the Yaesu mobile. Bart Lee KV6LEE won the GP4L shortwave radio. I tried this radio out and it is really a gem. Very small in size, drains very low current, full digital readout with digital alarm clock. This radio is used by many government agencies and was rated a best buy by Popular Communications magazine. Here is a summary of the prize winners:

Yaesu FT-1802 2 Meter 50 watt mobile - Tony Halog KR6EG
Shortwave Radio - GP4L - Bart Lee KB6LEE Vivitar 7x50 binocular - Bill Hardy KF6VOG

Computer tool set - Terry Arnall KB6EBZ
Power Strips - Terry Arnall KB6EBZ, Edison Fong WB6IQN
12 V spot light - Ron Quan KI6AZB
2 -Self powered flashlights - Margaret Wong KF6WDO and Bart Lee KB6LEE
Keychain Tool set - George Chong, W6BUR
DBJ-1 dual band base antenna - Bill Chin KC6POF
DBJ-2 portable dual band antenna - Tony Halog KR6EG

For attendence, we had a total of 22. These include Edison (Sharadon, Mei-lin and Violet) Gary Gin, Verne Orme, George and Hetty Chong, John Tim, Joe Lee, Leang Yee, Bill Hardy, Howard Louie, Bart Lee, Tony and Connie Halog, Margaret Wong (with friends Betty and Tiffany), Cecilia with her husband Adolfo and daughter Letty.

Here are some pictures of 2006 Field Day.

There's John Tim W6QNT checking out the prizes.

Nice to see the ladies. Hetty WB6SHU, Margaret KD6WDO, Cecila KG6ICM, Betty, Tiffany and Letty.

Tony KR6EG walked away with the Yaesu FT1802.

The food was great and everyone walked away satisfied. This was only one of the tables of food.

Bart KV6LEE , Gary KN6LV, Verne AA6YE, Joe W6DOB, Leang K6LJF

Even my daughter had fun.

Minutes from the Board Meeting July 30

Attendees: W6EE W6BUR N6MNV KC6POF WB6IQN KF6WDO KR6EG KF6WEA

1. The Board has agreed that the Cathay picnic will be held on Saturday 23 September. Edison stated that folks can show up around lunchtime, or beforehand if they will be preparing food.

2. The Board agreed to donate $25 to W6BBA to assist in supporting the 40 meter gang internet group.

3. The club is researching a general access website for the club.

4. The Board agreed to the following dues structure for 2007. The single-year dues for full membership will be $15. A 5-year full membership will be available for $50. All membership dues are non-refundable. Single and multi-year dues will remain static or may be changed upward in 2008 and successive years.

5. The discussion to further revise the dues structure was continued but tabled due to time restrictions and other considerations.

Respectfully submitted on 2 August 2006

Tony Halog KR6EG

Annual Picnic - Saturday, September 23

Place: National Semiconductor, corner of Lawrence Expressway and Kifer in Sunnyvale

Time: September 23rd 11:00AM-3:00PM

Costs: Bring a Potluck to share, FREE parking, FREE drinks, Raffle Tickets: $5 each

This year's annual picnic will be again held at National Semiconductor Park in Sunnyvale due to popular demand. Can't beat this park since there are no park fees, no charge for parking, and best of all, it is close to HRO's, Computer Surplus, Halted Specialities and Costco. Bring your friends, family and guests. Kids are welcome. The more the merrier. It's all free except for the raffle tickets. Bring your favorite dish and show people what great cooks we are. If it is anything like Field Day, the food will be unforgettable. We will have access to microwave ovens at National Semiconductor. If you don't cook, go to Costco across the street and have your pick. The club will provide for the drinks and utensils.

After the picnic we can all go to HRO's and see what is new or go bargain hunting at Computer Surplus or Halted Specialities.

The Grand Prize this year will be a Yaesu FT7800 dual band mobile radio and a 17" LCD monitor. If you do not happen to win either of these prizes, the remaining choice of a 400 watt UPS power supply could make it worth your while. If you are a weekend handy man, the cordless drill set could be just the thing you are looking for. If you don't win any of these, there will still be a dozen or so smaller prizes. Last year we had 82 people attend**.** Aside from the banquet, this is out biggest event.

Directions: On 101 take Lawrence Expressway West. Go about 0.5 miles and there will be an underpass, go past Arques Ave (this is the turnoff for HRO's). The next intersection is Kifer, make a right at Kifer. Go about 2 blocks and National Semiconductor is on your right. Go past the main building and eventually you will see a big park on your right. Turn in and that is where the picnic will be. Monitor the Southbay repeater N6MNV 442.70+ 100Hz pl if you get lost. We will have color balloons at the entrance.

First prize- Yaesu FT7800R. VHF/UHF 1000 memory transceiver

Complete cordless 18v toolset with extra battery.

400 watt UPS for your computer or Ham shack.

17 inch LCD monitor.

Installment 3 The HT220 – Ed Fong WB6IQN

In the last two installments, I discussed the different models of the Motorola HT220 radios. This small marvel, which was introduced in 1969, just stunned the industry with its small compact size, ultra low current drain (3.5ma) and very impressive 2 watt output while only draining

300ma. Even today, there are no radios that perform at this level today. Rather the modern day approach to radio design is to have a synthesizer and microprocessor for the controller and display. Sure enough, the ability to have 1000 memories, digital mode, encryption, etc is essential in today's wireless world but one must still appreciate the creativity that went into a basic radio like the HT220.

To appreciate this small marvel, it is only fair to compare it to other radios of its time. No one had a handheld VHF transceiver at the time that resembled the HT220. Lexan, a very durable plastic, was a foreign term. At the time, any mention of plastic and it was synonymous to "cheap". But Lexan was different. It was light but yet durable. The frame was made of a rust proof zinc/nickel alloy, not ordinary aluminum.

The only other portable radio that was available at the time was the Drake TR-22. This was a portable over the shoulder radio. It was spec at 1 watt. The original had options for 6 channels but later models had 12 channels. It ran on 8 AA cells with a built in telescopic antenna. I never own one of these radios but I do remember them being the talk of the town back in 1970's. I remember Cy WB6TCF having one and the big discussion on the net (WB6AAE repeater 146.82) was where to get replacement nicad batteries cheap. I remember that Mike Quinn's Surplus was the place to go. There was also talk about changing the output driver transistor and getting 1.5 watts out of it. The Drake sold for slightly over $200 dollars. But it was not just the cost of the radio but the crystals you had to buy afterwards. There were no synthesizers at the time. For 12 channels, one would need 24 crystals. At $5 piece (and that was consider cheap in those days), one would have $120 in crystals.

Later on in about 1972 time frame, Standard communications introduced their 146A. This was a true handheld and sported 5 channels. It had an output of about 1.5 watts and sold for about $200. I did own one of these and all I can say is that it was no HT220. The case was made from standard plastic of the time. So it would not survive a drop on concrete. The leather case was essential. Its stand by current was about 20ma. About 5x more current than the HT220. Most important, it was about 2x the size of the HT220 slimline. So although it did gain popularity due to its low cost, everyone knew it was no HT220.

Later during the year (late 1972), Henry Radio introduced the Tempo FMH. It was slightly smaller than the Standard 146A and its claim to fame was that is retailed for under $200. After this, it was clear that the market for a VHF HT was the future. From there, Kenwood, Yaesu, Wilson, and a bunch of other companies started to introduced smaller, cheaper, and more featured radios. But certainly it was the HT220 which set the trend.

The Drake TR22 -12 channel version.

The Standard 146A – 5 channels

The Tempo FMH was marketed by Henry Radio of Los Angeles

Leon B. Yee, 507-Parachute Infantry Regiment, HQ/HQ Company, Demolition Platoon

By: Bill Tom – KN6QD

Among the latest find of lost troopers is Leon B. Yee of the 507th PIR, Demolition Platoon. Leon was born in 1918 in San Francisco's Chinatown. He was drafted into the army before Pearl Harbor and was trained as a combat engineer, but he immediately volunteered for the paratroops when war was declared.

Leon made a night jump into Normandy on June 6, 1944 to start the D-Day Invasion. He was on a mission to blow up a German machine gun nest, when a machine gun opened up on him and a ricocheted round hit him in his left temple to knock him out. He was transported back to

England for treatment. The bullet was not removed for fear of further injury his brain. He now lives with the side-effect of occasional epilepsy that is controlled with the drug Dilantin.

He was discharged to home with his 100% disability. He said he was glad he survived the war in a healthy state, even though he carries a German souvenir missile lodged in his brain.

Leon was the only Chinese GI in his regiment, as was Bill Tom in his. During World War II, about 16% of the American population went into military service, but from among the Chinese population, 21% were in our military. However, a proportionately high percentage of them were sent off to the China-Burma-India (CBI) Theater of Operation. Bill remarked that only the best from among them were sent to fight in Europe.

Leon Yee came into our scope only because Joe Lee of the 511th PIR, 11th Airborne Division, referred his name to us.

Leon Yee, 507-HQ, and Bill Tom

Your Immune system – Bill Tom KN6QD

Your immune system is an organization of specialized cells and organs that protect your body from outside biological interferences. When the immune system is functioning properly, it protects the body against bacterial and viral infections, destroying cancer cells and foreign antigenic substances. If the immune system weakens, its ability to defend the body also weakens, allowing pathogens, including viruses that cause common colds and flu, to grow and flourish in the body. The immune system also performs surveillance of tumor cells, and immune suppression has been reported to increase the risk of certain types of cancer.

The most important function of the human immune system occurs at the cellular level of the blood and tissues. The lymphatic and blood circulation systems are paths for specialized white blood cells to travel around the body. White blood cells include B cells, T cells, natural killer cells, macrophages, and dendritic cells. Each has a different responsibility, but all function together with the primary objective of recognizing, attacking and destroying bacteria, viruses,

cancer cells, and all other pathogens. Without this coordinated effort, a person would not be able to survive more than a few days before succumbing to an overwhelming infection. When a pathogen has entered the body, it sets off a chain reaction that starts with the activation of macrophages and natural killer cells that reach the site of infection and destroy as much of the pathogen as possible. While this is happening, it is the job of the dendritic cells to take "snap-shots" of the battleground to take to the lymph nodes in order to activate T cells, which then activate B cells to produce antibodies against the pathogen.

Many disorders of the human immune system fall into two broad categories that are characterized by: A weakened immune response: There are 'congenital' (inborn) and 'acquired' forms of immunodeficiency, characterized by an attenuated response. Chronic granulomatous disease, in which phagocytes have trouble destroying pathogens, is an example of the former, while AIDS ("Acquired Immune Deficiency Syndrome"), an infectious disease caused by the HIV virus that destroys $CD4^+$ T cells, is an example of the latter. Immunosuppressive medication intentionally induces an immunodeficiency in order to prevent rejection of transplanted organs.

Overzealous immune response: On the other end of the scale, an overactive immune system figures in a number of other disorders, particularly autoimmune disorders such as lupus erythematosus, type I diabetes (sometimes called "juvenile onset diabetes"), multiple sclerosis, psoriasis and rheumatoid arthritis. In these, the immune system fails to properly distinguish between self and non-self, and attacks a part of the patient's own body. Other examples of overzealous immune responses in disease include hypersensitivities, such as allergies and asthma.

Suppression of the immune system is often used to control autoimmune disorders or inflammation when this causes excessive tissue damage, and to prevent transplant rejection after an organ transplant. Commonly used immunosuppressants include glucocorticoids, azathioprine, methotrexate, cyclosporin, cyclophosphamide and mercaptopurine. In organ transplants, cyclosporin, tacrolimus, mycophenolate mofetil and various others are used to prevent organ rejection through selective T cell inhibition.

It must be understood that the immune system in your body has no eye, ear, nose or finger to see, feel, hear or smell what bad things are floating around in your blood stream. It is up to the B-cells, the T-cells and dendritic cells to confront and get a "lock and key imprint" of the shape of the pathogen. Then your subconscious brain, via the lymph nodes, will cause antibodies of that particular shape to be manufactured that will attach themselves to immobilize the pathogens of that specific shape. Meanwhile, the macrophages and killer cells will be in the front lines destroying pathogens to buy time while these specific antibodies are being produced. The ferocity of your immune system in action may be indicated by the degree of rise in your body temperature during your illness, but there is a supposition that the high temperature itself might be a body defense to kill off some sensitive pathogens.

Therefore, it is essential for you to eat quality foods, with intake of vitamins and minerals, to supplement and augment your immune system with the vitality needed to protect you.

Bill Tom – KN6QD