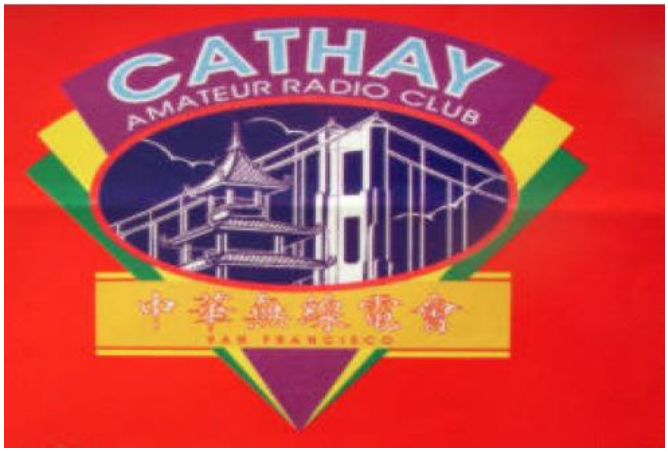


Cathay August 2023

www.cathayradio.org

President: George Chong, W6BUR **email:** *W6BUR@comcast.net*
Vice President North: Leonard Tom, *NX6E* **email:** nx6e@hotmail.com
Vice President South: Bill Fong, *W6BBA* - **email:** w6bba@arrl.net
Secretary/Membership: Rodney Yee, *KJ6DZI* - **email:** rodyee2000@yahoo.com
Editor: Rodney Yee, *KJ6DZI* - **email:** rodyee2000@yahoo.com
Treasurer: Vince Chinn aka Mingie, *W6EE* - **email:** vince@vincechinncpa.com
Web Master: Edison Fong – *WB6IQN* - **email:** edison_fong@hotmail.com
Mission: The Cathay Amateur Radio Club is basically an active social club of Ham Radio Operators and their spouses. We support local community requests for HAM emergency communications. Several of us are trained in CPR/ First Aid and are involved with community disaster preparedness.

Monday Night Net Time: 9 PM Local Time/PST, Repeater: WB6TCS - RX 147.210, TX 147.810, Offset +0.6 MHz, CTCSS/Tone PL100 Hz

Please note: Repeater: N6MNV UHF 442.700 Mhz, Offset +5MHz, CTCSS/Tone PL 173.8 Hz in South San Francisco is cross linked every Monday Night Net at 9 p.m. to WB6TCS 2-meter repeater.

The CARC Monday night net is the best way to find out the latest club news. All check-ins are welcome.

Message from the President: George Chong, *W6BUR*

Hello CARC Members and Friends;

Many thanks to Mr. Denis L. Moore – WB6TCS (SK) & his son; Robert Moore for the use of his repeater for our CARC Monday Night Net.

I wish to thank our CARC members that set aside their valuable time to participate in our Monday night's nets.

Introduction Tech Article:

According CDC the in Respiratory Syncytial Virus (RSV) infection rate in California. Is currently at 0.459 percent positive as of 7/1/2023.

Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and pneumonia in infants and a cause of severe disease in adults older than age 65 years. Although RSV typically circulates during the winter, during the week ending September 24, 2022, 4.7% of respiratory illness specimens from surveillance in California tested positive for RSV, a level usually not seen until late November.

The good news after 50 years of working on an RSV vaccine, several RSV vaccine has been developed For more details read the Tech Article.

Introduction: In Person Tech Session, September 9, 2023

Newsletter, Ed Fong *WB6IQN* is hosting a tech session on the latest Ham technology as mentioned in the previous newsletter, July 2023. Further details are at the end of this newsletter.

Please send your RSVP to Ed Fong <edison_fong@hotmail.com>

Chat sub s'em to all you CARC members! - George W6BUR.

Public Service Announcements

HAM CRAM / HAM Licensing

For upcoming HAM Licensing locations please refer to:
http://www.arrl.org/find-an-amateur-radio-license-exam-session

Auxiliary Communications Service (ACS)

The Auxiliary Communications Service (ACS) is a unit of trained professionals who supply communications support to the agencies of the City and County of San Francisco, particularly during major events/incidents. ACS goals are the support of gathering and distribution of information necessary to respond to and recover from a disaster.

The ACS Net begins at 1930 hours (7:30 p.m. PT) local time each Thursday evening, on the WA6GG repeater at 442.050 MHz, positive offset, tone 127.3 Hz. The purpose

of this net is to practice Net Control skills, practice checking in with deployment status in a formal net, and to share information regarding upcoming ACS events. Guests are welcome to check in. ACS members perform Net Control duty on a regular basis. On the second Thursday of each month, the net is conducted in simplex mode on the output frequency of the WA6GG repeater, 442.050 MHz no offset, tone 127.3 Hz.

ACS holds its General Meetings on the third Tuesday of each month from 1900 hours to 2100 hours local time. Currently meetings are exclusively conducted over Zoom during the COVID-19 pandemic, ACS looks forward to meeting in person again as soon as possible.

Upcoming meeting dates in 2023 are:

- August 15, 2023
- September 19, 2023
- October 17, 2023

Location of in person future ACS meetings are yet to be determined as the regular location is under reconstruction. All interested persons are welcome to attend. For further information, contact Corey Siegel KJ6LDJ <kj6ldj@gmail.com>.

For more information, please attend an ACS meeting, check in on the ACS radio net, or call 415-558-2717.

Free Disaster Preparedness Classes In San Francisco – NERT Taught by San Francisco Fire Department (SFFD).

http://sf-fire.org/calendar-special-events

+ TBD

Spring into Readiness!
This Virtual Drill will take place from 9am-12pm with virtual skill rotations and words from some special guests!

Invitation and sign-up coming next week!

+ Recertifications - Coming Soon!

Now that San Francisco has entered the Red Tier for COVID-19 Transmission (see https://covid19.ca.gov/safer-economy/#county-status for more details), we are working to schedule recertification trainings for NERTs who were current as of December 2019 or later. Stay tuned for details and times over the next month!
(At this time, all class 5&6 recerts will take place outdoors only, at the SFFD Division of Training at 19th St & Folsom St in the Mission.)

***SFFD DOT** is the Fire Department Division of Training. All participants walking, biking or driving **enter through the driveway gate on 19th St.** between Folsom and Shotwell. Parking is allowed along the back toward the cinderblock wall.

Visit ***www.sfgov.org/sffdnert*** to learn more about the training, other locations, and register on line. Upcoming Special NERT Events.

San Francisco Police Department: Auxiliary Law Enforcement Response Team (ALERT)

The Auxiliary Law Enforcement Response Team (ALERT) is a citizen disaster preparedness program designed. The ALERT program is for volunteers 16 years of age or older, who live, work, or attend high school in San Francisco.

Graduates of the San Francisco Police Activities League (P.A.L) Law Enforcement Cadet Academy are also eligible to join.

ALERT volunteers will no longer need to complete the Fire Department's Neighborhood Emergency Response Team (NERT) (www.sfgov.org/sfnert) training and then graduate into two 8 hour Police Department course specifically designed for ALERT team members.

ALERT members will work closely with full-time and/or Reserve Police Officers in the event they are deployed after a disaster. The Basic ALERT volunteer will have no law enforcement powers other than those available to all citizens.

SFPD ALERT Training (New Members)

The next SFPD ALERT training class has been scheduled for: TBD

* Class date indicated are only for new members

IMPORTANT- All participants must complete the background interview process in order to be eligible to attend the ALERT training class.

Eligible ALERT participants may register for a training class by contacting the ALERT Program Coordinator, Marina at sfpdalert@sfgov.org, or by telephone at 415-401-4615.

SFPD ALERT Practice/Training Drill

All active/trained ALERT members are asked to join us for our next training drill, via scheduled for on TBD

For more information on the San Francisco Police Department ALERT Program, email us at sfpdalert@sfgov.org, or call Lt. Marina Chacon (SFPD Ret.), SFPD ALERT Program Coordinator, at (415) 401-4615.

For additional information on the web please refer to:
https://sfgov.org/policecommission/alert

Tech Article:

FDA News Release

FDA Approves First Respiratory Syncytial Virus (RSV) Vaccine Arexvy Approved for Individuals 60 Years of Age and Older

https://www.fda.gov/news-events/press-announcements/fda-approves-first-respiratory-syncytial-virus-rsv-vaccine

Date: May 03, 2023

Today, the U.S. Food and Drug Administration approved Arexvy, the first respiratory syncytial virus (RSV) vaccine approved for use in the United States. Arexvy is approved for the prevention of lower respiratory tract disease caused by RSV in individuals 60 years of age and older.

"Older adults, in particular those with underlying health conditions, such as heart or lung disease or weakened immune systems, are at high risk for severe disease caused by RSV," said Peter Marks, M.D., Ph.D., director of the FDA's Center for Biologics Evaluation and Research. "Today's approval of the first RSV vaccine is an important public health achievement to prevent a disease which can be life-threatening and reflects the FDA's continued commitment to facilitating the development of safe and effective vaccines for use in the United States."

RSV is a highly contagious virus that causes infections of the lungs and breathing passages in individuals of all age groups. RSV circulation is seasonal, typically starting during the fall and peaking in the winter. In older adults, RSV is a common cause of lower respiratory tract disease (LRTD), which affects the lungs and can cause life-threatening pneumonia and bronchiolitis (swelling of the small airway passages in the lungs). According to the U.S. Centers for Disease Control and Prevention, each year in

the U.S., RSV leads to approximately 60,000-120,000 hospitalizations and 6,000-10,000 deaths among adults 65 years of age and older.

The safety and effectiveness of Arexvy is based on the FDA's analysis of data from an ongoing, randomized, placebo-controlled clinical study conducted in the U.S. and internationally in individuals 60 years of age and older. The main clinical study of Arexvy was designed to assess the safety and effectiveness of a single dose administered to individuals 60 years of age and older. Participants will remain in the study through three RSV seasons to assess the duration of effectiveness and the safety and effectiveness of repeat vaccination. Data for a single dose of Arexvy from the first RSV season of the study were available for the FDA's analysis.

In this study, approximately 12,500 participants have received Arexvy and 12,500 participants have received a placebo. Among the participants who have received Arexvy and the participants who have received a placebo, the vaccine significantly reduced the risk of developing RSV-associated LRTD by 82.6% and reduced the risk of developing severe RSV-associated LRTD by 94.1%.

Among a subset of these clinical trial participants, the most commonly reported side effects by individuals who received Arexvy were injection site pain, fatigue, muscle pain, headache and joint stiffness/pain. Among all clinical trial participants, atrial fibrillation within 30 days of vaccination was reported in 10 participants who received Arexvy and 4 participants who received placebo.

In two other studies, approximately 2,500 participants 60 years of age and older received Arexvy. In one of these studies, in which some participants received Arexvy concomitantly with an FDA-approved influenza vaccine, two participants developed acute disseminated encephalomyelitis (ADEM), a rare type of inflammation that affects the brain and spinal cord, seven and 22 days, respectively, after receiving Arexvy and the influenza vaccine. One of the participants who developed ADEM died. In the other study, one participant developed Guillain-Barré syndrome (a rare disorder in which the body's immune system damages nerve cells, causing muscle weakness and sometimes paralysis) nine days after receiving Arexvy.

The FDA is requiring the company to conduct a post marketing study to assess the signals of serious risks for Guillain-Barré syndrome and ADEM. In addition, although not an FDA requirement, the company has committed to assess atrial fibrillation in the postmarketing study.

This application was granted Priority Review designation.

The FDA granted approval of Arexvy to GlaxoSmithKline Biologicals.

###

The FDA, an agency within the U.S. Department of Health and Human Services, protects the public health by assuring the safety, effectiveness, and security of human and veterinary drugs, vaccines and other biological products for human use, and medical devices. The agency also is responsible for the safety and security of our nation's food supply, cosmetics, dietary supplements, products that give off electronic radiation, and for regulating tobacco products.

Yale Medicine

https://www.yalemedicine.org/news/should-you-get-the-new-rsv-vaccine

Should You Get the New RSV Vaccine?

By: Kathy Katella Date: July 24, 2023

Effective vaccines for older people and a monoclonal antibody for babies could reduce hospitalizations during the next RSV season.

RSV is a respiratory illness that can lead to hospitalization and death in older people and babies. But now, two RSV vaccines aimed at older people are expected to

become available this fall. Meanwhile, a monoclonal antibody for infants and toddlers up to age 2 is awaiting the CDC's recommendation and sign off.
Photo by Getty Images

This winter, when the usual sneezing, wheezing, coughing, and fevers start up, there will be extra protection for people at high risk from at least one common illness. Respiratory syncytial virus (RSV) causes mild cold symptoms in most people but can lead to hospitalization and even death in older people and babies. But now, two new RSV vaccines aimed at older people and a monoclonal antibody for children up to age 2 could become available as soon as late summer or early fall.

"A lot is changing for RSV," says Scott Roberts, MD, a Yale Medicine infectious diseases specialist. "There have been attempts to make a vaccine for decades, and they have failed for a variety of reasons."

One turning point came with the investigation of an RSV protein called "RSV fusion (F)" that provided potent stimulation to the immune system—research that paved the way to clinical trials showing positive results. "Now, it looks as though we may have two vaccines for adults in time for the next RSV season—and there are more potential RSV therapeutics in the pipeline," Dr. Roberts says.

Older people start to lose immunity as they age—they're unable to fight off infections, such as RSV, as well as they did when they were younger, explains Dr. Roberts. Plus, the COVID-19 pandemic may have led to several years of lost immunity since RSV wasn't really circulating during that time. However, by November 2022, RSV was surging in children, and the RSV hospitalization rate for older adults was 10 times higher than usual for that time of year. More people were becoming infected, probably as a result of more in-person, maskless contact, he adds.

In June, the Centers for Disease Control and Prevention (CDC) confirmed the Food and Drug Administration (FDA)'s approval of the two vaccines for older people, specifying that those ages 60 and older "may" get them based on "shared clinical decision-making," meaning they may receive a single dose based on discussions with their health care provider about whether RSV vaccination is right for them.

In July, the FDA approved another preventive option, a monoclonal antibody called nirsevimab (brand name Beyfortus™) for newborns and infants who were born during an RSV season or who are entering their first RSV season and for children 24 months of age or younger who are still at risk for severe RSV disease during their second RSV season.

Dr. Roberts and Thomas Murray, MD, PhD, a Yale Medicine pediatric infectious diseases specialist, answered questions about the coming options for older adults and kids.

What is RSV, and why is it a threat to some people?

RSV is a common respiratory virus that usually causes mild, cold-like symptoms. It's a seasonal illness, typically starting in the fall and peaking in the winter. Once a person is infected, the treatment is supportive care, such as over-the-counter medications and maintaining hydration. Most people get better in a week or two.

But when RSV makes its way down into the lungs, causing lower respiratory tract disease (LRTD), it can cause vulnerable people, including those 65 and older, to develop life-threatening complications, such as pneumonia, and make existing conditions, such as asthma, congestive heart failure, and chronic obstructive pulmonary disease (COPD), worse. Each year, this leads to 60,000 and 160,000 RSV hospitalizations in adults 65 and older, and 6,000 to 10,000 deaths.

In children younger than 5, there are approximately 2.1 million RSV-related outpatient visits a year, 58,000 to 80,000 hospitalizations, and 100 to 300 deaths.

How effective are the RSV vaccines for older adults?

Both vaccines for older adults use traditional platforms—similar to a flu shot (and not to be confused with the mRNA technology introduced by Pfizer-BioNTech and Moderna to prevent COVID-19). The RSV vaccines work by introducing an inactivated RSV protein into the body, where it fuses to host cells and stimulates the immune system to recognize the actual RSV virus if/when it encounters it and help prevent severe disease.

Both vaccines performed well in clinical trials, according to data presented to the FDA. Arexvy™, developed by GSK, was the first to receive FDA approval—in early May—based on data from a trial conducted by the company in the U.S. and internationally. The ongoing trial is following participants through three RSV seasons. In late June, GSK reported an overall efficacy of 82.6% against lower respiratory tract disease during the first season, 77.3% for mid-season, and 67.2% over two seasons. Against severe disease, efficacy was 94.1% during the first season, 84.6% at mid-season, and 78.8% over two seasons.

The second vaccine, called Abrysvo™, from Pfizer, showed an efficacy of almost 89% against LRTD involving at least three symptoms in the first year after vaccination, and 78.6% mid-way through a second season in the data presented to the FDA. LRTD symptoms include new or increased cough, wheezing, sputum (phlegm) production, shortness of breath, and/or tachypnea (abnormally rapid breathing).

While data showed that one vaccination could be protective for at least two seasons, no determination has been made on how frequently the shots should be given.

Will there be an RSV vaccine available for children?

The FDA is considering a vaccine that would be given to pregnant women, who would then pass the protection on to their fetuses.

Abrysvo, Pfizer's vaccine for older people, was recommended to the FDA for this purpose by its advisory panel in May. If the FDA approves the shot, it would be given to mothers-to-be in their late second or third trimester of pregnancy to help them develop antibodies against RSV that would be passed along to the fetus—and it would continue to provide protection to the baby after delivery.

Clinical trials for the vaccine in this age group showed an 81.8% efficacy in preventing severe respiratory illness within three months after birth and 69.4% in the first six months of life. However, a few of the FDA advisors expressed concern over a slight increase in preterm births among women who got the shot—5.6% in vaccinated women compared to 4.7% in an unvaccinated group. (FDA officials said the difference was not statistically significant.)

What do we know about nirsevimab, the FDA-approved monoclonal antibody for children up to age 2?

Nirsevimab, which was developed by Sanofi and AstraZeneca, would be given in a single injection (to cover an entire RSV season) to newborns and infants in their first RSV season and children up to age 2 in their second one. This preventive option, which was approved by the FDA, must still be recommended by the CDC Advisory Committee on Immunization Practices, an independent expert panel, and signed off by the CDC's director.

A Phase 3 clinical trial showed that nirsevimab reduced RSV-triggered lower respiratory tract infections serious enough to require medical care by 76.4% and cut RSV hospitalizations in healthy full-term and near-full-term infants by 76.8%.

The monoclonal antibody works differently than a vaccine. "When you're injected with a vaccine, it causes your body to produce antibodies to protect you against whatever the vaccine is for," Dr. Murray says. "The monoclonal antibody bypasses that step. Your body gets—in this case—a single kind of antibody directly injected into the bloodstream so that if you're infected with that organism, the antibodies will bind to it and help you clear the infection."

The antibody reduces hospitalization significantly, he adds. "Even if it doesn't completely prevent disease, it can significantly reduce disease severity. This will be extremely helpful this year, especially after the RSV surge, we had last winter," he says. "And in the trials, there was no difference in adverse effects between the placebo and antibody groups."

Nirsevimab is the second FDA-approved monoclonal antibody created to prevent serious cases of RSV. The first was palivizumab (brand name Synagis®), which has been available to infants for more than 20 years, but only for those at high-risk for RSV, perhaps because they were born prematurely or have a congenital heart condition. Palivizumab is given by multiple injections over the course of an RSV season.

What if you are not an older person or an infant?

If you don't fall into one of those categories and are otherwise healthy, you probably don't need a preventive therapy, Dr. Murray explains. "Virtually every child has experienced RSV by the age of 2 and has immunity," he says.

Older children, teenagers, and most adults have strong immunity from multiple exposures and rarely experience LRTD from RSV. "We want to make things available to the highest-risk patients first," Dr. Murray says. "We'll have to wait and see whether or not the vaccines will be approved for people at other ages with chronic underlying illnesses, such as serious heart or lung problems."

Are there side effects from the vaccines or other concerns?

The CDC advisory panel expressed concerns about the clinical trial data to the point where they changed an initially strong recommendation to get the vaccine, if eligible, to one that says people over 60 "may" get an RSV vaccine based on a shared discussion with their doctors. For some, this may mean a discussion with their pharmacist. (The RSV vaccines will be covered by Medicare Part D and, thus, will be administered in pharmacies in many cases.)

One issue was that a few people in the trials developed Guillain-Barré syndrome in the days following the shot. Guillain-Barré is a rare disorder that causes muscle weakness and sometimes paralysis.

In addition, atrial fibrillation (an arrhythmia that can lead to blood clots in the heart) within 30 days of vaccination was reported in 10 participants who received Arexvy and four participants who received a placebo.

"One could argue that the benefits of these vaccines far outweigh the risks; for instance, the protection afforded against severe RSV disease is greater than the small risk of Guillain-Barré in this situation," says Dr. Roberts. There will be continued monitoring for Guillain-Barré and other issues once the RSV vaccines become available, he adds.

Another issue was that most of the participants in the clinical trials were in their 60s, so there was little data on other high-risk groups, such as those over age 80.

Should you get the RSV vaccine if you're eligible?

Both doctors say the benefits of the new vaccines for older adults outweigh the potential harms in cases where RSV could be life-threatening. They recommend them to all eligible older adults, particularly those with underlying health conditions, such as heart or lung disease, or weakened immune systems.

They also suggest that people who are vulnerable or could infect others who are at high risk take additional precautions this fall. Since RSV is spread through contact with contaminated surfaces, that includes washing hands often, keeping hands away from your face, avoiding kissing and other close contact with people who have cold-like symptoms, avoiding close contact with sick people, cleaning frequently touched surfaces, such as doorknobs and mobile devices, and staying home when you are sick. "All of these things will protect against RSV," Dr. Roberts says.

According to the CDC, RSV vaccines may be given at the same time as other vaccines.

Tech Session in Sunnyvale Saturday Sept 9, 2023 (includes free lunch).

Time: Saturday September 9th 2023 – 12 noon – 3PM

Topic: uSDX+ all mode compact transceiver – *Ed Fong WB6IQN and Ron Quan KI6AZB*

Place: 1163 Quince Ave. Sunnyvale, 408-245-8210

Menu - lasagna, salad, drinks, and chips. Ice cream for dessert.

Optional – bring a desert to share

Cost: FREE

Raffle Tickets: $5 each or 3 for $10

Grand Prize - uSDX+ All Mode HF portable transceiver or Lenovo i5 laptop or QB25 quad band 25 watt transceiver or Nano 1.5 GHz VNA.

Please RSVP to edison_fong@hotmail.com as to how many in your party are attending this event

Directions:

If you need precise directions from where you are coming from, go to www.googlemaps.com. They seem to give the best directions or give me (Ed Fong) a call on the phone.

Topic - Overview of the uSDX+ all mode HF transceiver

COVID-19 is finally over and we are bringing back the annual technical session at my house.

So, what is the newest fad in the world of ham radio? It is the uSDX+ all mode portable transceiver. This is a full software defined transceiver base on the Silabs synthesizer chip and the Atmel ATMEGA 328P FPGA. The entire radio including the 4000mAh Lion battery is only 1 lb 2 oz. The radio can operate all weekend on a single charge.

General coverage receiver – 3.5MHz- 30 MHz

Transmits on 80-10 meters including all WARC bands and even CB band

Built in CW decoder, keyer, all DSP filter from 4KHz to 50 Hz, DSP noise reduction

Output - 5 watts for CW - for SSB slightly under 10 watts.

What is interesting about this new gem is the Class E output amplifier. Class E is a switching amplifier, so although efficient, it cannot be directly used as a SSB output stage which historically requires a less efficient linear amplifier. So how do that achieve linear SSB amplification from a switching amplifier and achieve 80%+ efficiency? The key is in the 800 kHz sigma delta modulator. Come by and learn the new method of generating SSB is executed.

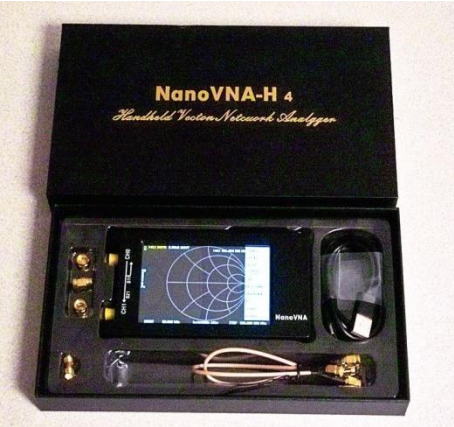
Raffle prizes – tickets are $5 each or 3 for $10. – below are the top 4 prize choices.

Winner gets choice of four prizes just in case they already own the uSDX+ transceiver

uSDX+ - QRP HF transceiver - Covers 80-10 meters – SSB, CW, digital QRP transceiver. 5 watts CW – 10 watt SSB. Built in CW decoder, full DSP noise reduction. Complete with 4000 mAh Li-ion battery, AC adapter/charger, Speaker/microphone

1st Prize Lenovo – Thinkpad X240 i5 processor with 8GB of memory and 256 GB SSD drive

Windows 10 operating system
CNET rates this laptop a 4.3/5
Up to 15 hours battery life.
PC benchmark 4,717 - very respectable.
Less than 3 pounds 0.8 inches thick
USB 3.0
12.5 inch screen - just perfect to carry around.
Intel HD4400 graphics processor
USB 3.0
Intel Cetrino Wifi.



Nano VNA - H4 - 4 inch 1.5 GHz VNA - Tuned antennas, duplexers, filters etc. Full touch screen. Latest version includes functions for TDR – time domain reflectometer.

Includes cables and full calibration kit.

3rd Prize Radioddity QB25 - Quad Band Mobile 25 watt transceiver.

This radio boast 200 memories, full software programmability, great bullet proof front end with 0.25 uV sensitivity, full FM broadcast radio, direct microphone key pad entry, absolutely the best color display out there and more.

If you have been looking to get on 220 MHz, this is the latest and greatest. You will be a proud owner of one of these radios.

Comes with programming cable and programming software.

Other Prizes UV5R Baofeng dual band handie talkie

UV5R Baofeng dual band handie talkie

VHF/UHF handie talkie 136-174 MHz 400-520 MHz
128 fully programmable channels
Li-ion 1800 mAh battery with smart charger
Built in LED flashlight
4 watts output
FM broadcast radio (65-108 MHz)

Choice of three for 2 nd prize

ATS-20 All Mode AM/FM/SSB/CW 100KHz-30 MHz - FM Stereo Receiver

DVM - digital multimeter