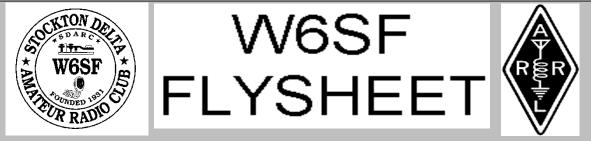
Stockton-Delta Amateur Radio Club



AN ARRL AFFILIATED CLUB <u>WWW.W6SF.ORG</u>

MARCH 2015

Welcome to the Stockton-Delta Amateur Radio Club

OUR 84" YEAR!

When you are courting a nice girl an hour seems like a second. When
you touch a red-hot stove a second seems like an hour. That's
relativity........Albert Einstein



PRESIDENT'S MESSAGE W6COB, Chuck

Greetings!

As I write this I have just returned from the Pedaling Paths for Independence Bike Ride for the Community Center for the Blind and Visually Impaired in Stockton.

This is a great event to support. It gave us a chance to test the APRS system (which worked great!) and was just fun to be part of. Riding in one of the SAG vehicles gave me the opportunity to discuss and demonstrate the capabilities and usefulness of amateur radio for these types of events. My driver and others were very impressed with the timeliness of our responses to differing situations and the real time tracking of all SAG vehicles. Score another one for the good guys!

It was also great to make some new friends in the process. We had a good turnout for support from the club. I'm sure someone will be giving a full report further into this month's Flysheet. I am looking forward to all our upcoming events this year and hope to add a few impromptu activities in between to spread the word about amateur radio. Looks like this year is shaping up to be a good one for the club!

Tomorrow I will be departing on a three week road trip so I will miss the March meeting, but I will be back for the April meeting. Everyone be safe and enjoy the continuing nice weather. 73,

Chuck, W6COB



MARCH MEETING NOTICE STOCKTON-DELTA AMATEUR RADIO CLUB THURSDAY MARCH 12TH, 2015 CHANGE OF VENUE NOTICE UJ'S RESTAURANT 6:30PM

QST QST QST All members and their guests are invited to attend the Annual General Meeting of the Stockton-Delta Amateur Radio Club on Thursday, March 12th, 2015. The meeting will be held <u>at UJ's</u> <u>Restaurant at Pacific Ave and Hammer Lane, Stockton. The meeting will start with supper at 18:30 PST.</u>

We will hear reports from the February 28th Peddling Paths for Independence Bike Ride.

Club membership dues for 2015 are now payable. Treasurer Dave N6LHL will be on hand to accept cash, check or money order. Click <u>HERE</u> if you would like to pay your dues on-line through the club website.

If you are need of transportation to and from the meeting, please contact Paul, N6KZW or John, NZ6Q and we will arrange transportation assistance for you.

WELCOME OUR NEWEST MEMBER KK1G, CALEB TRACY CA



MONDAY NIGHT NET CONTROL OPERATOR'S SCHEDULE FOR MARCH – APRIL 2015

The club holds a weekly net every Monday night beginning at 8:00PM on the **W6SF** Repeaters on 147.165Mhz VHF and 444.250Mhz UHF. Club Repeater information is listed at the end of the newsletter.

We need more Net Control Operators! If you would like to volunteer, or you can recruit a new net control operator volunteer, please contact Dave **N6LHL**. This is a great opportunity to improve your operating skill in a "minimal" pressure environment. The Net Control Script is available on the club website at

http://www.w6sf.org/netcontrolscript.html .

If you have a conflict, please contact Dave N6LHL as soon as possible in order to secure a replacement.

March 2nd March 9th March 16th March 23rd March 30th Guy, **W6MSU** Paul, **N6KZW** Charlie, **WB6NVB** Eric, **W6INP** Dave, **N6LHL**

April 6th April 13th April 20th April 27th Guy, **W6MSU** Paul, **N6KZW** Charlie, **WB6NVB** Eric, **W6INP**



STOCKTON-DELTA ARC MEETING REPORT FEBRUARY 12TH, 2015

Chuck **W6COB** gaveled the meeting to order at 19:33 PST.

He welcomed those members in attendance and spoke for a few minutes.

Dave **N6LHL** gave the treasurers report. The club account stands at \$5,451.20. The repeater fund is \$526.00

Dave **N6LHL** reviewed the projected expenses for the coming year. He also reported income from membership dues was continuing and that he anticipated a donation check from the Stockton Bicycle Club for support of their 100-mile Delta Century ride in May.

Charlie **WB6NVB** reported that efforts were being made to catalog equipment owned by the club. This asset management was a new obligation. Any member who may have gear belonging to the club in his or her possession should notify Charlie **WB6NVB**.

Paul **N6KZW** reported that there would not be a HamCram on February 21st. John **NZ6Q** would get with David N5FDL to determine how we will proceed with HamCrams this year. He encouraged members with a General License or Higher to become ARRL Volunteer Examiners and explained how to get your VE Certification. (Link to the ARRL VE page HERE). He reminded members that the club test sessions are also available on a regular basis at Fire Station 14 in Stockton.

John **NZ6Q** reported on plans for the February 28th Bike Ride. He explained how we would use APRS to "dispatch" SAG wagons as well as give the bicycle riders a "Dispatch Number" to call directly to Net Control should they need assistance.

John NZ6Q also commented on the plans to stream audio from the W6SF repeaters to the club website.

John **KD6FVA** reported on an interference issue on the W6SF UHF repeater with an uncoordinated Fresno repeater on 442.250 MHz. The trustee of that repeater has changed its frequency.

John **NZ6Q** raised the idea of creating an IRLP link on the club UHF repeater at 444.575MHz to create a Stockton link into the IRLP (Internet Repeater Linking Protocol) linking system. He reported that only a few hundred dollars of equipment would be needed to set this up. There was no discussion in support.

The meeting was adjourned at 20:37 PST.





Pedaling Paths to Independence Bike Ride Report

On Saturday, February 28th, several members braved the early morning cold and threat of rain to support the Community Center for the Blind and Visually Impaired annual Pedaling Paths to Independence Century Bicycle Ride. The ride is an annual fund raiser to support activities for its San Joaquin County clients. Last year's ride saw over 400 participants and raised over \$40,000 for the Community Center. This year the turn-out was expected to be larger and certainly would have been, had the morning weather been as good as the afternoon. In spite of the weather, over 425 registered for the ride and 342 participated.



John NZ6Q & Paul N6KZW at Net Control

This year we set up Net Control (NCS) closer to the building at the start-finish and used the tables and cover provided by Ed **N6XMA**. Great investment – thank you Ed. Net Control used the Tracy Amateur Radio Club station in a box and Dave **N5FDL** loaned us he APRS digi-peater to improve coverage of the APRS units in the SAG wagons. We used the **WB6ASU** repeater on Fowler Peak for Primary channel and the N5FDL repeaters at 147.015 (PL 114.8 +) and 444.400 (PL 114.8 +) on Gopher Ridge as back-up and command channels respectively. There was outstanding coverage across the entire course. The direct to dispatch phone number 980-SAG0 was set up and given to each rider to call directly to NCS should they have a problem on the course. There was one incident on the course resulting in 3 riders being brought back to start-finish. Also a few riders were brought by SAG primarily due to exhaustion.

As Chuck W6COB mentioned in his President's Message, the ride gave us an opportunity to demonstrate the capability of ham radio to others, and teach us how to handle radio traffic of varying priority while operating in the field.



Chuck W6COB, Bob K6DGQ & Charlie WB6NVB



SAG 6 – Cecil KK6QXQ & Gayle KK6RAO

Joni Bauer from the Blind Center said it best "This couldn't be done without all of you".

Ed N6XMA SAG 1 Dave N6LHL Chuck W6COB Dave N6DCH Charlie WB6NVB Cecil KK6QXQ Terry KK6KGX

SAG 2 SAG 3 SAG 4 SAG 5 SAG 6 SAG 7

Bob K6DGQ Eric W6INP Larry KI6LNB Paul N6KZW John NZ6Q Gayle KK6RAO

Farmington Rest Stop Milton Rest Stop Shelton Rd Rest Stop Net Control Net Control SAG 6

We covered every rest stop, relaying messages for food and supplies. We put a ham in each SAG wagon and even created 2 SAGs that were 100% ham radio operated (SAG 2 & SAG 6).



Bob K6DGQ & Charlie WB6NVB at Farmington Rest Stop

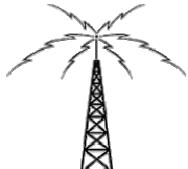
Chuck, W6COB on SAG 3

Lessons learned. Here are a few. First, make sure we have extra operators and equipment. We had one operator call in sick and Joni added a SAG we were not aware of. This caused us to realign operators to cover everything. Second, set up the APRS system a few days in advance including labeling all radios to be used. In this manner we can have APRS radios issued at the start of the event already set up with the operator's assignment. Third, we should add APRS as a cell phone app for those hams with a smart PCS device. SAG6 used their app and it proved very reliable.

Participants were treated to a delicious lunch of grilled chicken, pasta, bread and salad provided by DeVinci's Deli at the start – finish line. They stayed on site with food until the last two riders came in after 5:00PM.

Ham Radio support was no longer needed after the last rest stop closed. We terminated the net at 15:00 PST.

Sunday Morning I received a phone call from a most appreciative Joni who could not thank us enough for the support we offered her again this year. Great Job everyone for being part of such a huge success!



WHAT IS A REPEATER?

Let's get basic for a few paragraphs... and if you're an old-timer, you might want to read through this section just to see if we got it right.

First, what exactly is a "repeater"? And why do we use them?

Without repeaters, the communication range between Amateur VHF-FM mobile and handheld radios at ground level is limited -- five to fifteen miles for mobiles, and just a couple of miles for handhelds. The distance you can communicate is usually referred to as "line-of-sight" -- you can talk about as far as you can see (if you cut down the trees).



To extend our range, we use **repeaters**. A repeater is a specially designed receiver/transmitter combination. When you operate through a repeater, its receiver picks up your signal on the *input* frequency, and the transmitter re-transmits -- or "repeats" -- you on the *output* frequency. For example, one of the SDARC repeaters hears you as you transmit on 147.765 MHz, and repeats you onto 147.165 MHz.

Repeater antennas are located on tall towers (444.575), buildings, or mountains (147.165 & 444.250), giving them much greater range than radios with antennas near the ground. And when you're in range of a repeater, you can talk to everyone else in range of that repeater.

HOW DO YOU USE REPEATERS?

There are literally thousands of repeaters across the US (and the world). Each one can have it's own peculiarities and unique operating procedures, but there are some basics that apply to almost all of them.

PLAIN OLD TALKING. Mostly, you're here to get on the air and chat, right? OK, first you set your radio for the repeater you want to use. Don't know how to find a local repeater frequency? The SJHAM website (<u>http://www.sjham.com</u>) has a list of the local repeaters in the area.



Once you've selected a repeater and dialed it up on your radio, the first thing you should do is...**LISTEN** for a minute. Repeaters are **party lines.** Lots of people use them on and off throughout the day, and the one you've selected may be busy with another conversation right now. So listen for a minute. (Does anyone remember what party lines are? Kids, ask your grandparents!)

If the repeater isn't busy, key your transmitter and say something like "NZ6Q listening. Anybody available?"

When you release your transmit button, most repeaters will stay on the air for a few seconds, and many will send some kind of *beep*. Then, the repeater transmitter drops off the air. This little interlude is called **hang time**. The beep is there to remind everyone to leave a pause between transmissions in case someone wants to break in. Even if there's no beep, leave a pause anyway. Somebody may have just come across a traffic accident and needs the repeater to report it. If nobody leaves a pause between transmissions, they can't break in.

If somebody answers you, then have a good time! You can talk about anything you want – there are not many rules about the content of Amateur conversation. You **can't** use Ham Radio to conduct your business, but you **can** talk about where you work and what you do. Prime time TV language is encouraged. Remember, you're not having a private conversation – you may have lots of listeners, some of them children. Keep that in mind as you choose language and subject matter.

THREE-WAY RADIO. Not all conversations are strictly two-way. Three, four or five or more Hams can be part of a **roundtable** conversation. A free-wheeling roundtable is a lot of fun... and it poses a problem: when the person transmitting **now** is done, who transmits **next**? Too often, the answer is **everybody** transmits next, and the result is a mess. The solution is simple -- when you finish your transmission in the roundtable, specify who is to transmit next. "... Over to you, Rick. KN4AQ."

WE PAUSE FOR STATION IDENTIFICATION. The *Rules* say you must ID once every 10 minutes. Give your callsign when you first get on, then once every 10 minutes, and again when you sign off. You don't have to give anyone else's callsign at any time, although sometimes it's a nice acknowledgment of the person you're talking to, like a handshake.

BREAKING IN. Repeaters are shared resources -- the party-line. There are many times and reasons that a conversation in progress might be interrupted. You might break in to join the group and add your comments on the subject at hand. Someone might break in on you to reach someone else who is listening to the repeater. You might have to report an emergency. How to break in is the subject of debate and disagreement. Here are some suggestions:

- **Pick a good time.** If you have an emergency, a good time is **NOW**. That's why there's a pause between transmissions. Otherwise, listen a bit. Read the ebb and flow of the conversation. One of the fastest ways to establish a reputation as a jerk is to frequently butt your way onto the air without regard for the people already talking.
- Give your call, and say what you want. When you've listened and decided it's OK to break in now, transmit quickly when the other station stops, **before** the beep, and say something like this: "NZ6Q, I have an emergency," "NZ6Q, can I make a call?" or "NZ60, comment" Avoid the use of the word "Break", as it's use has historically been connected with Emergency Traffic in Amateur Radio. Not everyone knows that, so Plain English works better.
- The exception is when someone actually announces an emergency. Then **CLEAR** 0 THE DECKS! DO NOT TRANSMIT! The station who declared the emergency has the frequency, and unless they ask for your help, don't give it. Unless... always an unless... they obviously don't know how to handle the situation... and you DO. (You do, don't you?)



#\$%~á@&#+*!!

What was that I just heard? A burst of foul language and nasty noises on the repeater? Jamming? Sounds like something straight out of CB! I'm **OUTRAGED**, and I'm gonna tell that sucker off! He can't get away with that on our repeater! Gimmie that microphone! Cool down. It doesn't happen often, but it does happen – it's a big world out there, and there are some bad people in it. Some of them find a Ham Radio now and then, and discover the delight of offending an audience. The key word is **audience.** Deliberate interference and bad language are designed to make you react. The person doing it wants to *hear you get mad*. They love it. And if they don't *get* it, they go away, usually quickly. So when you hear the rare nasty stuff on the repeater, just ignore it. Don't mention it at all on the air. Don't mention that you're not mentioning it. Sometimes a repeater control operator will decide that the best way to handle the situation is to turn off the repeater or one of its functions for a while, but the rest of us should bite our tongues and be silent.

DX! Well, you probably won't be hearing Albania on two-meters anytime soon, but VHF does have it's own form of DX. Sometimes, though, VHF/UHF opens up, and stations can be heard for hundreds of miles. This is another book-length subject. We'll just squeeze in that VHF/UHF band openings are a double-edged sword.

It's exciting to talk to someone 500 miles away, and it's OK, too. But keep in mind that repeaters were designed to cover local territory, not half the country. So when the band opens up, there is the potential for lots of interference as well as lots of fun. Repeaters on the same frequency will suddenly be too close together. You could very easily be keying up two or



more of them at once. To be responsible, get to know where your signal is going (a repeater directory will help). Use a directional antenna, minimum power and keep your conversation short.

How much power is too much? Within 50 miles of the 147.165 repeater (that's every place in Stockton and Lodi) two to five watts into a mobile antenna is all you need. 50 watts is excessive. At home, with an antenna up on the roof, 50 watts is **really** excessive for talking through a local repeater.

VOTING. The 147.165 repeater has a "voting receiver" in Stockton to help "boost" the coverage for low power mobile and portable signals. What this receiver does is add a 2nd set of "ears" to the repeater. Low power, portable and mobile signals are received at this site (in Northwest Stockton) and transmitted up to the repeater site on a separate frequency. At the repeater, A device called a comparator measures this signal against the signal at the repeater and "votes" between the two to re-transmit the stronger more reliable signal for all of us to hear. Plans are to add new voting receivers to the W6SF 444.575 repeater in Stockton this year.

EMERGENCIES. Helping to communicate in emergencies is Amateur Radio's **#1** reason for existence. Repeaters are excellent tools for emergency communication, and the most frequent type of emergency called in is the traffic accident. That's why we leave a pause between transmissions – you never know when someone (you) will need the repeater in an emergency.



ARES is the Amateur Radio Emergency Service. During any kind of emergency, ARES operators will be using repeaters for local coordination and traffic-passing. Check out the <u>www.sjham.org</u> website for more details on which repeaters are planned for use in an emergency. During these operations, the active repeater will probably be *closed* to regular conversations. But unless a major disaster has hit the area, there will be other repeaters available for regular activity. Ask the net control station for the status of the repeater.



PUBLIC SERVICE. Hams across the country regularly help charitable organizations with communications during fund-raising events like bike-a-thons. Repeaters and simplex are both used for public service events. Their activity isn't too compatible with other hams rag-chewing on the same channel, so during the event a repeater will again be "closed." If you need to make a call, ask the net control station and most likely you can use the repeater for a minute with no problem.

GIVING DIRECTIONS. What's giving directions doing in a repeater operating guide? Just listen for a while, and you'll hear why. We give a lot of directions on repeaters, to locals in an unfamiliar part of town, and to traveling hams visiting the area. And, sad to say, too often we do it badly. One person will give adequate directions, and someone else just has to break in to give his favorite shortcut. Or somebody gives a two-minute long string of street names and landmarks, non-stop. The poor, lost ham who asked will then thank everyone politely, turn off the radio, and pull into a gas station to try again. We literally fall all over each other trying to be too helpful!

If someone has given directions that will get the traveler to her destination, let it be. Make a correction only if the directions are dead wrong (they'll end up in Albania?). If it's your turn to give the directions, keep them short and simple. And it might be helpful to find out where the mobile station **is** before telling him where to go!

NETS. Repeaters are great places for nets, and there are lots of nets. A net is an organized on-the-air activity. We've mentioned a few already, like SKYWARN and ARES, but there can be many other types – traffic nets, rag-chew nets, specialty topic nets, club information nets, and more. When a net is active on a repeater, the repeater is *closed* to other activity. The net-control is in charge of the frequency, and all communication should be directed to that station first. The W6SF weekly net is every Monday night starting at 8:00 PM local time.

TIMERS. Almost all repeaters have something called **timers**. A timer is a clock that starts counting when you begin to transmit through the repeater. Typically, this clock is set to **time-out** after about three minutes. That means that if you transmit continuously through the repeater for more than three minutes, the repeater will go off the air (we call it *timing out*). Repeater timers usually reset to zero when you, the user, stop transmitting. If the repeater has a *beep*, the timer probably resets when you hear the beep. So you have to keep your transmissions under three minutes, and always wait for the beep, to avoid having your transmission dumped by the repeater timer.

CODED SQUELCH. There are two kinds of Coded Squelch commonly available to Amateurs: **CTCSS**, commonly called **PL**[®] (Private-Line, a Motorola trade name, and also called **Subaudible Tone**), and **DTMF**, more generally known as **Touch-Tone**[®] (an AT&T trade name). The purpose of coded squelch is to allow special signaling from a transmitter to a receiver, either to turn the receiver on, or to access special functions (like autopatch).

CTCSS (Continuous Tone Coded Squelch System) keeps your receiver quiet on a busy channel until the station **you want** calls. It adds a "subaudible" tone to your audio, one of 37 very specific frequencies between 67 and 250.3 Hz. Yes, humans can hear these frequencies quite well, so they're "subaudible" because your receiver's audio circuit is supposed to filter them out. A receiver with CTCSS will remain silent to all traffic on a channel unless the transmitting station is sending the correct tone. Then the receiver sends the received audio to its speaker.

In commercial radio service, this allows Jane's Taxi Company and Bob's Towing Service to use the same channel without having to listen to each other's traffic.

In Amateur Radio, many repeaters require users to send the correct CTCSS tone to use the repeater. This rarely means the repeater is *closed*, for use only by members. More likely it's simply used to avoid having the repeater keyed up by users of another repeater on the same frequency, or by noise at the repeater site.

You can use CTCSS yourself, if you have a decoder in your radio, to silently monitor a busy channel for stations calling just you. Arrange the tone to use in advance, and set your radio to CTCSS decode mode. Have your friend send your tone when she calls. You won't hear anyone else.

But, **be sure to turn your decoder OFF** before you make a call, or when you answer one, or you might interfere with someone you aren't hearing. Note that many repeaters will not pass these low frequencies, so test the repeater you're planning to use before you count on it as a signal path. Some repeaters will pass the higher tones, but not the lower tones.

DTMF (Dual Tone Multi Frequency, more commenly known as Touch-Tone) is used all over Amateur Radio for autopatching and remote control.

The SDARC Repeaters

147.165 W6SF 107.2 Tone	This is SDARC "Flagship" repeater, located at the 2500' near Fiddletown, just above Jackson. Typical mobile coverage is south to about Modesto, North into Sacramento, East into the foothills and west to the coastal range of Mt Diablo, Mt Oso and the Altimont Pass.
444.575 W6SF 107.2 Tone	Our second repeater is on a tower in downtown Stockton at about 150 feet above average terrain. Coverage around Stockton is very good and voting receivers will improve portable coverage. Take your conversation to 575 when your both in town.
442.250 W6SF 107.2 Tone	This machine is located at the same site as 147.165. It is linked to the VHF repeater. If you are using a dual band radio and monitoring another repeater, you can hear everything on this repeater you hear on 147.165

\$ 2015 DUES PAYABLE! \$

Gue\$\$ What? It's that time of year again! Time to dig deep into the ol' pur\$e or pocket and get your due\$ out to keep the Radio Club humming again for another year.

By popular acclaim, this year'\$ due\$ will **not** be rai\$ed! This mean\$ we voted to keep them at \$20 for an individual, and \$30 for a family. \$0, the best thing to do is to \$how up at the February 12 membership meeting with a nice crisp \$20 bill in hand, or your check payable to the "Stockton-Delta ARC" will gladly be accepted. In the event of an earthquake or tornado that keeps you from attending the meeting, you may \$end your check to:

Stockton-Delta A.R.C. P.O. Box 690271 Stockton, CA 95269-0271

If you have a PayPal account, you can go to the club website ($\underline{w6sf.org}$), click on the PayPal icon, fill out their information and send your dues to the club. Click here to go to the website.



OK, you may ask, why pay dues?? Because we have bills to pay!! We have a repeater site to maintain, we have a PO box to pay for, we have a repeater that needs electricity and repair parts, insurance, and a few odds and ends to buy. Also, while not required, paying your dues shows your dedication to the club's mission and helps the club provide opportunities for new hams, new technologies and new frontiers to be explored. I am pleased to note that more than half of last year's members paid their dues by January15th.

Your attention to the club needs are appreciated.

....de Dave N6LHL, Treasurer





March 7th – 8th, 2015 – ARRL DX Contest Phone - To encourage W/VE stations to expand knowledge of DX propagation on the HF and MF bands, improve operating skills, and improve station capability by creating a competition in which DX stations may only contact W/VE stations. <u>http://www.arrl.org/arrl-dx</u>

March 12th, 2015 – Stockton-Delta ARC Club Meeting – Meeting will be at 6:30PM at UJs Restaurant on Pacific Ave at Hammer Lane Bear Creek Community Church, 11171 N Lower Sacramento Rd, Stockton. Meeting Starts at 7:30PM

March 14th – 15th, 2015 – State QSO Parties – Louisiana, Idaho, Wisconsin – State QSO parties are a great time to get hard to work counties or add to your 5-Band Worked All States Award.

March 21st – 22nd, 2015 – State QSO Parties – Oklahoma & Virginia



W6SF CLUB INFORMATION

MEETINGS: Regular meetings are held on the second Thursday of each month at **7:30pm, at the Bear Creek Community Church, 11171 Lower Sacramento Road, just north or Eight Mile Road.** Members, guests, and people having an interest in Amateur Radio are invited to attend. The next meeting is scheduled for **Thursday, March 12th**.

WEEKLY NETS: Held each Monday evening at 2000hrs on **147.165+ PL 107.2 Hz and 442.250 + PL 107.2** Members and visitors are invited to check in. There is also an unofficial get together on Thursday evenings (except meeting night) at 7:30pm **on 28.457.** Amateurs with the proper license are encouraged to participate.

CLUB REPEATERS: Located in the Sierra at 2500 feet, the club repeater covers the southern Sacramento and Northern San Joaquin Valleys. The call sign is W6SF, and can be heard on **147.165+**Mhz with a PL tone of 107.2 Hz. From the same site, the club also operates a 440MHZ repeater at **442.250 +** with a PL of 107.2 Hz.

The club also operates a UHF repeater located in downtown Stockton **444.575MHz +** with a PL 107.2Hz. Coverage includes the Stockton area as well as parts of Lodi, Manteca, Tracy and Ripon.

CLUB SIMPLEX FX: 147.51 MHz.

CLUB WEBSITE: http://www.w6sf.org

2015 CLUB OFFICERS & LEADERSHIP:

President:
Vice President:
Treasurer:
Secretary:
Member At Large:
Call Sign Trustee:
Repeater Trustee:
Membership Chairman
Newsletter Editor

W6COB, Chuck O'Banion WB6NVB, Charlie Johnson N6LHL, David Hardwick W6INP, Eric Chapa N6KZW, Paul Engleman AA6K, Shirl Rose KD6FVA, John Kester open NZ6Q, John Litz ncrmc@pacbell.net wb6nvb@arrl.net n6lhl@softcom.net perrla1@aol.com n6kzw@sbcglobal.net rosesl@prodigy.net jbkester@att.net

john@litz.com

CLUB DUES:

\$20 SINGLE and \$30 FAMILY Stockton-Delta Amateur Radio Club, P.O. BOX 690271, STOCKTON, CA 95269-0271

We thank you for your continued support!