KERN COUNTY - CENTRAL VALLEYAMATEUR RADIO CLUBTHE COMMUNICATORMAY 2018



Left to right John Stumm, Neal Janzen, Mario Arribas and Larry Callahan during monthly board meeting



Special thanks to Neal and Randy for their tireless efforts in preparing dinner for the Club.





Club President Larry Callahan KF6JOQ

Hello freinds and members Hope everyone is enjoying this great weather we are having Fieldday is just around the corner so if you are planning

to bring out equipment please let Mario N6ABT or myself know. Well the band conditions are up and down but there is stations to work out there,good hunting.

Larry Callahan KF6JOQ

Spaghetti Dinner & Fundraiser

The Spaghetti Dinner was held last month as a all-you-can-eat dinner, this is our annual fundraiser for our Amateur Radio Club. The meal was prepared by Neal Janzen, N6YGG and Randy Randall, KC6ZRF they and many other members and friends help make this a great evening.





Breakenridge Mt 145.150

Don't Call It A Comeback

"Last Man Standing" was resurrected at Fox for Season 7 on Friday after ABC canceled the popular show.

The news comes after Allen teased a possible reboot of his series on social media a few days ago. The show's original cast, including Tim Allen, Nancy Travis, Jonathan Adams, Amanda Fuller, Christoph Sanders and Jordan Masterson, will also return.

"Excited?" asked Allen in a statement sent to Fox News. "Team LMS was in the sixth inning, ahead by four runs, stands were packed and then for no reason, they call off the game. It leaves you sitting in the dugout, holding a bat and puzzled. Now we get the news from Fox that it's time to get back out on that diamond – hell yes, I'm excited!

"When I heard the offer to create more episodes of 'Last Man Standing,' I did a fist pump so hard I threw my back out. It's the fans! I could not be more grateful for the fans who wrote petitions and kept up the passion and incredible support for the show.

"And a fist pump, ouch, for Dana Walden and Gary Newman at Fox for not only listening to the fans but for making the bold move to bring 'Last Man Standing' back. I'm sure audiences will be curious to see what we look like after all these years. Oh, has it only been one year? Well, just goes to show you – a lot can happen in a year." "Last Man Standing" tells the story of a married father of three who tries to maintain his manliness in a world often dominated by women. Gary Newman and Dana Walden, chairmen and CEOs of Fox Television Group, said the decision to bring back the series was a no-brainer.

"Last Man Standing' ended too soon and the outcry from the fans has been deafening," they shared. "We've wanted to put the show back together since its final taping a year ago, and Tim never gave up hope either. Thanks to its millions of devoted viewers and the irrepressible Tim Allen, we haven't seen the last of 'Last Man Standing."" "Last Man Standing" averaged 8.3 million viewers in Live + 7 ratings for the 2016-17 season on ABC. It was the network's second most-watched comedy, after "Modern Family."

comedy, after "Modern Family." However, ABC canceled the sitcom in May 2016 despite its high ratings. Many speculated at the time that the network axed the series over its politics — a rumor that ABC vehemently denied at the time. After ABC's success with the reboot of "Roseanne," which features a pro-Trump character, calls for the network to bring back "Last Man Standing" were revived. Allen, a conservative himself who has voiced his support for Trump, played Mike Baxter, who is also politically conservative on the show.

The 64-year-old told Fox News in August that he was overwhelmed by the support of his fans.

W6LIE Repeater 145.150 Located on Breckenridge Mountian By Glen Del Tour, WB6DTJ Breckenridge Ro



17722

Photo's By Jon Wihelm WA6KLB

First floor equipment room



Major Obstruction to ou the North

Red Arrow is pointing to our new antenna for the 145.150

Green Arow: The 220 link antenna

The Purple Arrow is pointing to the uhf link to the 146.910 repeater.

Breckenridge Repeater Road Trip

For those of you who are not aware, the 146.15 repeater is located on Breckenridge Mountain, about 30 miles east of Bakersfield. These are not easy miles. Six lane freeways turns to four lane highway, to two lane black top, then a dirt road and ultimately washed out deer trails. On Friday, April 20, Dave Light, KG6YSZ, Jon Wilhelm,WA6KLB, Frank Wells, KD6UQZ, Thurman Van De Mark, WB6NJC, John Stumm, KG6ZBN and Glen Del Tour, WB8DTJ, made the trek to change out the existing antenna for a nice, shiny new one.

Because of safety concerns we were required to relocate the new antenna somewhere other than the current mast. With all the metal and wire hanging from pillar and post, choices were limited. After some discussion the decision was made to relocate the 220 antenna where the link resides and place the repeater's antenna on the 220 mast. It seemed simple enough at the time. The new antenna was assembled and clamps werepositioned on the ground. Jon clambered up the tower, reaching the catwalk that provides access to the multitude of antennas. Suffice it to say that the act of placing the antenna on the mast turned out to be a complicated geometric exercise. After a break for lunch and consultation with the group, the antenna was finally resting in place on its mast and firmly attached. The coax, however, refused to cooperate. Because of the late hour, the group descended to the valley floor.

Jon and Frank made the return trip the following Saturday and replaced the hard line. They did the necessary testing to ensure the antenna was doing its job. The pair was successful and they brought the system back on line. Due to the new antenna location and the massive parabolic dishes the signal is a bit attenuated in some areas but those in the west and south are able to make it in solid where it was questionable prior to the move.

One feature has been turned off. Stations are no longer able to briefly key the transmitter to test the repeater. A sustained signal is required in order to key up the repeater. This is a normal function and the repeater is working correctly. Work will continue to fine tune the system and the repeater committee is looking for signal reports from around the community.



Above photo shows the number of commercial antennas located at the site.

The old antenna can be seen on the extreme right side of the photo black arrow pointing to it. They would not allow the crew to go up and replace the antenna in it's old location.



Pictured from left to right – Thurman, Frank, Dave, seated, and Glen

Minutes of Board Meeting 26 April 2018--1745 hours By Neal Janzen, N6YGG

In Attendance were:

PRESIDENT: Larry, KF6JOQ	Present
1st Vice President: Mario, N6ABT	Present
2nd Vice President: Joe. WD6FPE	Present
Secretary: Neal Janzen, N6YGG	Present
Treasurer: John Stumm, KG6ZBN	Present

Director: Jim KK6DLN.....Present Director: Kurt, N6QPT.....ABSENT Director: Ben, N6SWR.....Present Past President:....Vacant

Participants attending: Jim WA6HZY, Randy KC6ZRF ; Dan, WA6JRP.

There was a quorum so the board could conduct the clubs business. Meeting called to order at 1745 hours by club president, KF6JOQ. He noted the meeting would be brief due to the spaghetti dinner.

Treasurer's report called for and motion made to accept by Joe, WD6FPE; 2nd by Mario, N6ABT. Motion passed. Secretary's report submitted via email to all board members and motion made by Joe, WD6FPE, 2nd by Mario, N6ABT. Motion also passed.

OLD BUSINESS: Field day was discussed. Larry, KF6JOQ noted that the R7 has been assembled and tested. It is set up for CW and will be left in that condition for use at field day. A "field day" meeting will be held in the near future to bring together all aspects of field day 2018. No date set.

Field day site discussed and the general agreement is to pay for the park to avoid any problems with the county. Nano node is up and running, but is a bit "buggy" and must be used in conjunction with "echo link". Larry, KF6JOQ said he had made Dan, AE6SX aware that it was available, but since he has not checked in three months the value of his input to the club net is questionable. When he does check in his signal quality is poor.

Repeater was discussed with more info up coming from the guys who worked on the repeater site. Briefly stated: a new antenna installed at a new location on the existing tower. We have lost signal to the north, but signals are improved in other directions, including the location of AB6CF. Board advised we cannot do much more at this juncture, but all avenues will continue to be explored. The club is bound by Kern County regulations so all aspects will continue to be explored and improvements made whenever possible.

NEW BUSINESS: Joe, WD6FPE, stated he had been approached by members who thought a "questionnaire" or "survey" should be submitted to the membership to get their input. He had prepared and handed out a sample of what might be used. He suggested it be mailed to all membership. Matter tabled until the board could review it. It was noted this had been tried before with very poor results.

MONTHLY FINANCE STATEMENT

Motion made by Neal, N6YGG to terminate the meeting; second by Joe WD6FPE. Motion passed. Meeting concluded.

April 2018 By John Stumm, KG6ZBN	SAVINGS ACCOUNT BEGINNING BALANCE 988.84 ENDING BALANCE 988.86				
	STAR BANK BALANCE3311.98				
	GENERAL INCOME: Dues 175 Donation 175 Raffle 93 Coffee 14				
	TOTAL INCOME457.00				
2018 Club Officers & Directors President - Larry Callahan KF6JOQ kf6joq@sbcglobal.net 1st VP -Mario Arribas N6ABT n6abt@hotmail.com	BALANCE 3768.98 EXPENSES Raffle Prize QYT Mobile with antenna. Total 118.94				
WD6FPE wd6fpe@gmail.com Secretary- Neal Janzen	ENDING BANK BALANCE 3650.04				
N6YGG neal@janzen.org Treasurer- John Stumm KG6ZBN jstumm@bak.rr.com Director- James Johnston KK6DLN jimthej@me.com	REPEATER FUND Reserve -350.00 Balance 3300.04				
Director - Kurt Poeschel N6QPT poesch6@aol.com Director - Ben Durhamt N6SWR Ben.n6swr@gmail.com	INSURANCE reserve - 350.00				
Past Pres- John Stumm KG6ZBN jstumm@bak.rr.com	AVAILABLE BALANCE 2950.04				

A Totally Biased and Completely Ill-informed Look at The Ten High-Frequency Amateur Radio Bands By Don Keith N4KC, www.n4kc.com, www.donkeith.com

Okay, those of you who typically flame articles posted here based only on the title, go ahead and flame, flame, flame. The rest of you, please hold your flamethrowers behind your back for a moment until I tell you why I felt called to compose this bit of personal observation.

Not everybody who reads these threads is as wise, experienced, or steeped in ham radio lore as you and I are. Despite dire warnings and that silly AOL piece about the imminent demise of the hobby, it still seems to be attracting newcomers at a good clip. And although many of you seem to expect it, not every one of them will know all there is to know the first day they apply RF to antenna. Many more are finding it in their hearts to upgrade to General Class, too, moving beyond line-of-sight to the realm of sky wave. It occurred to me that a primer on what to expect from each band—and a hint or two based on my own experience-might have some value for these folks.

If you have been licensed since spark gap, or if you know how to coax P5s and BT7s out of otherwise dead bands, this article is not for you. Hit the BACK button up there and go about your business. (But, heck! Read through what I have to say anyway. It might just get you off that band where you've been molting since the end of WWII and you'll see what else the big, beautiful spectrum has to offer!

That being said, if you are new to HF, let me highly recommend that you listen. Listen! And then listen some more. If you do not get anything else out of this article, let that be it. Listening is a great way to learn the nature of the various bands as well as the customs among the natives that infest them.



160 meters - 1.8 to 2.0 megahertz

An interesting bit of radio spectrum, this. You can pretty much forget it during daylight hours except for local communications of less than 25 miles or so. It is also quite a challenge in the summer in most places because of its susceptibility to atmospheric static. But when the weather cools, it can be a delightful band for both ragchewing and DX.

It has its technical challenges. A half-wave dipole should be about 270 feet long to be efficient here, and that is more space than many can muster. Other antenna types can do well here, and especially vertical radiators. After all, just below the 160 meter ham band is the commercial AM band. Every one of those guys use vertical antennas. But even a quarter-wave vertical needs to be about 135 feet tall unless you employ wizardry like coils and traps. Many swear by the inverted-L, which offers the advantages of both a vertical and horizontal radiator in far less space. I use a full-wavelength loop, which rings the backyard. It does well on paths out to 750 miles or so, and I have worked Europe many times with it, but it would need to be higher in the air for real DX.

You will find many long-established roundtable QSOs on this band. Some are friendly and welcoming to strangers who are bold enough to break in to their groups. Others will either ignore you or give you an earful that might hurt your precious feelings. I would suggest that you treat a roundtable or QSO on the air on any band much as you would a conversation on the street. See if they seem welcoming of interruption. If not, go somewhere else. There are myriad frequencies available. Don't interrupt the flow of the conversation, either. Wait for a lull. But don't be surprised if you are told to go play in traffic.

	3500 KHZ 3525	3585	3600 3700	3800	4000	Channels
EXTRA	CW & DATA	AUTO DATA		SSB PHONE LSB		
ADVANCED	CW & DATA	AUTO		SSB PHONE LSB	t N	IFTERS
GENERAL	CW & DATA	AUTO DATA	• • • • • • • • •	SSB PHON	IE LSB Best	t Evenings
TECH&NOVICE	CW 200 WAT1	S			•••••	Nights

80 meters - 3.5 to 4.0 megahertz

"80" is really TWO bands - 80 and 75. On a frequency-vs.-wavelength basis, it is one of our biggest chunks of real estate, and that can cause some

problems if your antenna system is not broad-banded enough or you do not use some kind of matching device, and you want to work both ends of the band. Like 160, 80/75 is for shorter distance chats during the daytime—but often out to several hundred miles—and susceptible to lightning static. It, too, gives good sky wave at night during parts of the year and you can literally work the world if you are patient enough and have a good enough setup. You will find most stations using dipoles or variations, but the vertical is a good DX antenna here, too, because of its low angle of radiation. It just won't work as well for closer communicating. There are even some beams in use here. You may have to employ a '68 Buick straight-eight engine to rotate one of those bad boys, though!

Also like 160, you will hear plenty of good-old-boy roundtables as well as nets, mostly because the band supports regional communications so well. The band has also gotten a reputation for having more than its share of curmudgeons, characters, and just plain goofballs, many of whom use language more appropriate for a billiard parlor. I hear them and you will, too, even though such foolishness is not as rampant as some seem to think. That's why our radios are equipped with tuning knobs. Use it. If they want to show their ignorance and lack of proper upbringing, allow them to do so without benefit of comment from you.

Nets serve a useful purpose and may or may not appeal to you. Give them a listen and decide for yourself. Avoid causing them interference. It is easier for you and your contact to move up or down a few kilohertz than for a couple hundred of their guys to QSY.

If you hold a General class license, you may be inspired to go for the Extra when you see the big chunk of SSB spectrum those license holders get on 80/ 75. Extras can do the voice thing all the way from 3.6 megahertz to the top of the band, 4.0. And the band plan calls for a DX window from 3.79 to 3.8, frequencies on which you can only listen and salivate when Europe or Oceania are rolling in. There are also some great CW DX opportunities on the low end of the band, but you need the Extra to venture below 3.525 where many of them hang out.



60 meters - 5.330 to 5.405 (or thereabouts)

Here is where the "ill-informed" part of the title comes in. I have never operated on 60 meters. It is an odd little band for a number of reasons.

First of all, it is channelized. You are only allowed to use upper sideband. You are limited to 2.8 kilohertz of bandwidth centered on one of those five channels. And you can only run 50 watts "maximum effective radiated power relative to a half-wave dipole." Huh?

Many commercially available radios will not transmit on 60 meters, nor will you find very many antennas for sale for this band either. As far as I can tell, the vertical and dipole are usually the aerials of choice.

All that being said, this is an intriguing band. It could offer the best in terms of propagation of 80/75 and 40, and with such limited power, you are on equal footing with everybody else. It would seem ideal for antenna experimenters since whatever you use would not be so massive, and the results not masked by running scads of power.

I listen here sometimes and it seems to support good DX and enough people who enjoy ragchewing that you can usually find somebody to talk with. They all seem to be a polite lot, maybe because of the restrictions presented by channelization and low power.

All that seems to make this band right up my quirky alley. Someday, maybe.

	7000 KHZ 70	25	7125	11	175	7300
EXTRA		CW & DATA		SSB PH	ONE LSB	
ADVANCED		CW & DATA		SSB PH	ONE LSB	
GENERAL		CW & DATA	• • • • • •		SSB PHONE LSB	Best Day
TECH&NOVICE		CW 200 WATTS				••• Evenin

40 meters - 7.0 to 7.3 megahertz

Many proclaim 40 to be their favorite band and there is good reason...except for one big negative. The negative in a minute, and even it has recently gotten better. No matter your ham radio interest, 40 supports it nicely. CW? Plenty of it. Digital modes? It's there, almost all day every day. Ragchewing? You can almost always scare up a conversation, and in my experience, it always seems to be with someone interesting to talk with. Nets? Beaucoups! And devoted to about anything you can think of, regardless your interest outside amateur radio.

Antennas are more reasonably sized here. A dipole is only about 63 feet in length. A quarter-wave vertical can be a bit over thirty feet tall with radials spread out on the ground or in the air around it that are about the same length. Even garden-home citizens can usually find enough room to erect a radiator for this band. If you experiment with antennas, you can have a blast. Vertical phased arrays. Weird wire antennas with exotic names. Even Yagis become something close to practical for some here.

This is a good QRP band, too. Stations with less than 5 watts output work the entire planet here.

Here's another band where the Extras can roam free, too, all the way down to 7.125 on SSB. And the lower 25 kilohertz of the band is a CW DXer's dream. Late afternoons all the way through an hour or so after sunrise, hams from all over the world communicate to some degree. I have worked well over 150 countries on 40 in the past three sunspot-deficient years with 100 watts and either a vertical, a G5RV, or the big, previously-mentioned loop doing the radiatin'.

One caveat and then that big negative I mentioned. The SSB authorization in many parts of the world do not match up with ours. You may hear a DX SSB station working stateside stations one after the other, but he is transmitting on 7.095. Occasionally you will hear a W, N, A, or K calling him on his frequency. Bad form! First, he will never hear that station because he is listening up...not the 2 kilohertz or 5 kilohertz normally used when DX operates "split." No, he's listening up "100" or up "150," and will usually let everyone know periodically. Remember what I said about listening? Anyone from the U.S. transmitting on SSB below 7.125 is operating illegally. Usually it is only because the op forgot to hit the "Split" button on his rig and not because he did not know better. At least, I hope so.

So what's not to love about 40 meters? Shortwave broadcasts. They are big and strong and really, really annoying, and you will hear them from 7.200 all the way up to the top. We share 40 meters with shortwave broadcasters in other parts of the world, so they are there legally. It is simply something you will have to deal with if you use this band.

There is good news, though. Early last year, the broadcasters had to abandon the frequencies up to 7.2 megahertz. "Supposed to" are the key words there. A few stations—mostly heard on the West Coast—continue to ignore the marching orders to move. However, the flight of the bulk of those short-wave guys has certainly made the SSB portion of the band from 7.125 to 7.2 megahertz much more desirable. And there's you yet another reason to crack the Extra class study guide!



30 meters - 10.1 to 10.15 megahertz

Now here's an interesting band! If you are a no-code licensee and have not gotten around to learning CW yet, there is nothing here for you. You are only allowed CW, RTTY and other data modes. If you think you need to make the lights dim throughout the neighborhood when you transmit, 30 is not your cup of electrons, either. You can only legally run 200 watts PEP. Okay, I know some people ignore that rule. I was born at night but it wasn't last night!

But, like the power and mode limitations on 60, this serves to put everyone on more or less equal footing. "Big guns" are the ones who have optimized their antennas, not their linear amplifiers. And their operating skills. Don't forget that one!

Like 40, this is a good DX band, best at night but often offering long-distance contacts in daylight hours. And while still a bit high in wavelength for a beam for most of us, it is possible to design some very effective antennas for 30. I have found it to be relatively empty during the daytime, except for RTTY, but it really comes alive at night.

I also notice quite a few ops using comparatively slow code here. I assume these are guys who simply cannot ignore the treats 30 meters offers but are not necessarily proficient in the CW. Guys slow down for them, too. This seems to be one of our more polite bands. Only in the most intense DX pile-ups have I heard colorful language used, and even then, unless your 4-year-old speaks CW, he'll never know that guy was questioning the marital status of the other guy's parents.

If you hold a General class license or above, the whole 50 kilohertz of this band is yours. It's that "equal footing" thing again. One other point: if you don't like contests and believe they are the ruin of radio-dom, no problem on 30. As a "WARC band," (so named because they were authorized at a World Administrative Radio Conference a while back), most contests are forbidden here.

	14000 KM	4025 14100	14150	14175 14	225	14350
EXTRA	CW	CW & DATA		DX PHONE	SSB PHONE USB	
ADVANCED		CW & DATA		SSB P	HONE USB	п мете
GENERAL		CW & DATA			SSB PHONE USB	Best D

20 meters - 14.0 to 14.350 kilohertz

The king of the DX bands! Long live the king! Even now, as we emerge from the lowest point in the sunspot cycle, treasures abound on this chunk of magnificent propagation. Granted we have to work a bit harder for it now than we did five years ago, or will in another few years. But even with limited power and wire antennas, I can have delightful conversations with stations in Switzerland, New Zealand, or Poughkeepsie.

Just this past weekend, while goofing around, I worked two new countries, one in the South Pacific and one in a former Soviet Union country. That was with 400 watts and a homebrew hex-beam. I've worked lots of odd-sounding call signs with 100 watts and a G5RV or simple, ground-mounted, multi-band vertical. There are plenty of things to occupy your leisure time, too. Slow-scan TV, RTTY, digital modes, nets, and more. Granted you are better off with a beam antenna and more power. Still, many QRP stations have confirmed contacts with ops in hundreds of countries. A vertical is a good choice on this band, and especially if your fancy favors DXing. Propagation-wise, 20 is best for DX around sunrise and sunset, but I work into Africa and the South Pacific at all hours if I am patient enough. It does tend to go to sleep at night nowadays, but do not write it off. Just when you think it's dead, there's a station on some exotic isle somewhere calling CQ.

Like 80/75, this band has its share of malcontents and just plain rude guys with microphones. Ignore the Canadian kook at 14.275, too. There is no sanity test for a ham radio license in this country either. But there are also an abundance of interesting people to talk to. I do not think I have ever had a boring QSO on this band, SSB, RTTY or CW.

Call CQ (after asking if the frequency is in use, of course) and you never know who will come back to you—a rock star, a missionary in Bolivia, the owner of a major amateur radio manufacturer—or even a retiree in Florida! And sometimes nobody. It is easy to get lost in the vastness of this band and the QRM if you do not have some power. People tend to answer CQs from louder stations if they envision a nice, long conversation.

If you are not into contesting, this band might be a challenge. There is likely some kind of radiosport event going on every weekend, and this is a popular band. The big DX contests and the annual ARRL Sweepstakes render 20 almost unusable. But the CW and SSB versions are on different weekends so you can move to the opposite mode and find the band remarkable open. Or go to 60, 30, 17, or 12 where no contester can be heard. Better still, jump into the middle of the contest and get your feet wet. These things are great for filling in the blanks in your Worked All States or DXCC list. And be forewarned: they can be addictive.



17 meters - 18.068 to 18.168 megahertz

"The Gentleman's Band." Have you heard that expression used when describing 17 meters? There does seem to be some validity in that description. There is little of the rush-rush of 20 here. For a DX band, there are more ragchews across oceans than on other bands, it appears. Even DXpeditions seem slightly more sedate when working 100 stations per hour on 17.

17 offers very good propagation at times and does not go to sleep nearly as much as its distant cousin, 15 meters. The atmospheric noise seems quieter here than on 20, too. Antennas are more modest. A mini-beam, hex, or vertical performs well. And power seems to be less an issue.

But as I say this, I tune the band and there is nothing but hiss and a couple of birdies internal to my fine rig. It is 2100 local time and an hour ago, the West Coast stations were booming in with an occasional ZL coming through. You can be enjoying a nice chat with a VE7 in British Columbia who is well above S-9 on the meter, and then, in a few seconds and with a "whoosh," he's gone. Then five minutes later, he's back, stronger than ever, talking with a station in Nicaragua. Until he disappears ten minutes after that, just as suddenly.

The band seems less crowded than others, even though it is relatively narrow, partly because of the nature of the propagation but maybe because tri-band beams and many commercially-sold verticals leave it off. My G5RV and my loop work beautifully here. I could modify my vertical, too, but why bother? I now have a homebrew hex-beam up that performs like a two-element Yagi here, and I love turning it around and hearing a station go from down-in-the-noise to in-the-room-with-me.

I'm not sure why 17 meters does not get the respect or activity it deserves. It is a very interesting band that offers truly exciting propagation at times, and, as mentioned, it performs well even with relatively low power and modest antennas. Plus it is simply quieter than other bands, in my estimation.

	21000 KHZ 21025	21200 21225 21275	21450 Best Days
EXTRA	CW & DATA	SSB PHONE USB	
ADVANCED	CW & DATA	SSB PHONE US	
GENERAL	CW & DATA	SSB PHONE	USB METER
TECH&NOVICE	••• CW 200 WATTS		Best Days

15 meters - 21.0 to 21.450 megahertz

If 20 meters is the "king," then 15 is the once and future "king of DX." You tune there most of the time nowadays and hear nothing but vast emptiness. Occasionally it opens to South America or the Caribbean, but mostly it is just "ssssssshhhhhhh." But wait a year or so. Just wait. There are already signs of life and it is exciting! If you like to combine ragchewing with DXing, if you enjoy working Europeans or Japanese stations on PSK31 or RTTY, if you want to close out your DXCC in one weekend, then 15 will be your band. Plus there is plenty of room to operate. It seems to go on forever!

By this point in the spectrum, too, the size of an antenna is starting to come down to the point that a full-size Yagi is possible on a postage-stamp-sized city lot. Heck, a dipole is only about eleven feet long on each side of the center insulator. There are many relatively inexpensive tri-band beams available and they all cover 15 meters. And despite the sheer size of the band in hertz, it is relatively small in wavelengths, so most any antenna will be efficient from bottom to top. It's true that once the sunspots begin to go into hiding again in three or four years, the band will once again return to "ssssssshhhhhhh." But it will be a great ride in the meantime. Stick something up in the air and join in the fun.

EXTRA	2	14890 KHZ	24930		24990	17
ADVANCED		CW	DIGITAL	PHONE)	METER
GENERAL		white				Best Days

12 meters - 24.89 to 24.99 megahertz

Now this is one odd band! It is stuck in there between 10 and 15 meters, and I find myself operating it so infrequently that I have to go back to the charts to see where I can legally use which mode. Like its siblings on either side, it appears to be dead, dead, dead most of the time during the sunspot lull. But I hear it can pop like crazy when things start heating up.

Also like 60, 30 and 17, many hams simply are not aware of this band, older gear does not include it at all, many amplifiers don't have it available or if they do, it is an afterthought and may have input matching problems, and there are no contests—ever—on this band. That means less activity.

I can verify that it sometimes offers surprising propagation, even when Old Sol sleeps. I have worked most of the major DXpeditions over the last several years here. Last month, I had a nice QSO with a ZL on 12 with no fading at all, in the middle of the afternoon.

Something tells me that as conditions improve, more and more hams will play in this nice playground. I certainly will! Just don't forget about it being there. I would love to work you.

	28000 KHZ	28200	28300	28500	29300	29600 29700	
EXTRA	CW & DATA	Beacons	PHONE	SSB PHONE USB	SATS	FM I	10
ADVANCED	CW & DATA	Beacons	PHONE	SSB PHONE USB	SATS	FM	
GENERAL	CW & DATA	Beacons	PHONE	SSB PHONE USB	SATS	FM	METER
TECH&NOVICE	CW & DATA	Beacons	PHONE	• • • • • • • • • • • • • • • • • •		· · · -]:	Best Days

10 meters - 28.0 to 29.7 megahertz

Want to work JAs and VKs with 100 watts and a coat hanger? Dream of communicating across the sea with 5 watts and a whip? That will be 10 meters at the top of the sunspot cycle. At least that is what they tell me.

This band often presents sporadic-E propagation (look it up...it is beyond the scope of this article), regardless of sunspots, which allows communication up to several thousand miles. That happens mostly in the spring and for a few weeks in early winter, but can occur at any time. It is also a good band for local communication up to a hundred miles (or more if you have elevation and power) on a regular basis, but then, when the band does open up, it can really mess with local nets and regular roundtables.

This band offers the first real use of propagation beacons, with a bunch of them just below 28.3. This enables you to learn quickly if the band is open. As with some of the other bands, they may well be propagatin' like crazy but if nobody transmits, nobody knows it. These continuously transmitting stations let you know signals are available. It helps, by the way, if you know Morse code. That is what they use to identify and tell you where they are. But even if you don't, and you tune down there and hear them chirping away in spots where there normally are not any signals, then you know the band is open to somewhere and you can cast out a "CQ"—back up there above 28.3 or below 28.2, of course, since this portion is supposed to be for beacons.

One more interesting aspect of 10 meters is that there are FM repeaters and simplex available, as well as satellite downlinks. Yep, the same kind of FM repeaters you may be accustomed to at VHF and UHF. It is a real trip to hear guys talking to each other on a repeater thousands of miles away, and you can jump right in and join them. The "ARRL Repeater Directory" lists many of them, as well as the access tones that most of them require for obvious reasons. I actually use a couple of repeater output frequencies as beacons, keeping my dial set on one of those frequencies so I can just hit the bandswitch button and tell in a second if the band is open to that area of the country.

So there you are, a brief (well maybe not so brief) travelogue of the amateur radio HF bands. We really should be thankful that we have access to such a broad range of spectrum and that it offers us such a wide variety of conditions and signal propagation.

I think if you give some of them a try, you will discover that each has its own personality and appeal, as well as its negatives. Then, if you like them, you can make sure you have antennas that allow you to fully experience them, and that you add them to your allotted operating time. If you don't, fine as well. But you may not ever find out what you are missing if you don't at least give them all a try.