



## **Goat Notes May 2021**





## Introduction about Signal Report

Do you monitor the 2m simplex calling frequency 146.520? I was cleaning up in the garage one weekend and had my radio monitoring. A call came through and “KN6GOG looking to make a final contact for my contest”. The call sign indicated that new was a new ham operator. I could tell by his voice that he sounded young. So, I took a pause from cleaning up and decided to give him the last contact he needed to make.

So, this will lead into one of our many topics for this month’s newsletter! I called him using my call sign “KE6LKV”. He replied you are coming in 5 by 9! He then asks how his signal is. Now I’m not totally new to Ham radio but, I was lost at this point in our brief exchange. Now I have heard people exchange these numbers in reference to signal report. But I was not sure exactly how or what the numbers actually indicated. You are coming in 5 by 9 I replied. I then had to sit back and think, I need to look up the details on what they are and how they work. I was on an HT so I had nothing to use as a reference to these numbers. My Boafeng HT has a very small display so I can’t really see the bars in the S meter either.

So, to the internet I went. I decided to learn about signal reports and what the numbers actually reflect information wise. I’ve heard them in the past mostly on Simplex and occasionally on repeaters for those asking for radio checks / signal checks. To my surprise his 5 by 9 was spot on with what I read. The 5-portion indicated I was perfectly readable. The 9 indicated that I had an extremely strong signal

So how do all these numbers vary? Below is a standard list for giving signal reports. This list below was sourced from the ARRL website.

What is RST? Readability, Signal Strength, Tone.

Link > [The RST System-](#)

### Readability

- 1--Unreadable
- 2--Barely readable, occasional words distinguishable.
- 3--Readable with considerable difficulty.
- 4--Readable with practically no difficulty.
- 5--Perfectly readable.

### Signal Strength

- 1--Faint signals, barely perceptible.
- 2--Very weak signals.
- 3--Weak signals.
- 4--Fair signals.
- 5--Fairly good signals.
- 6--Good signals.
- 7--Moderately strong signals.
- 8--Strong signals.
- 9--Extremely strong signal

### Tone

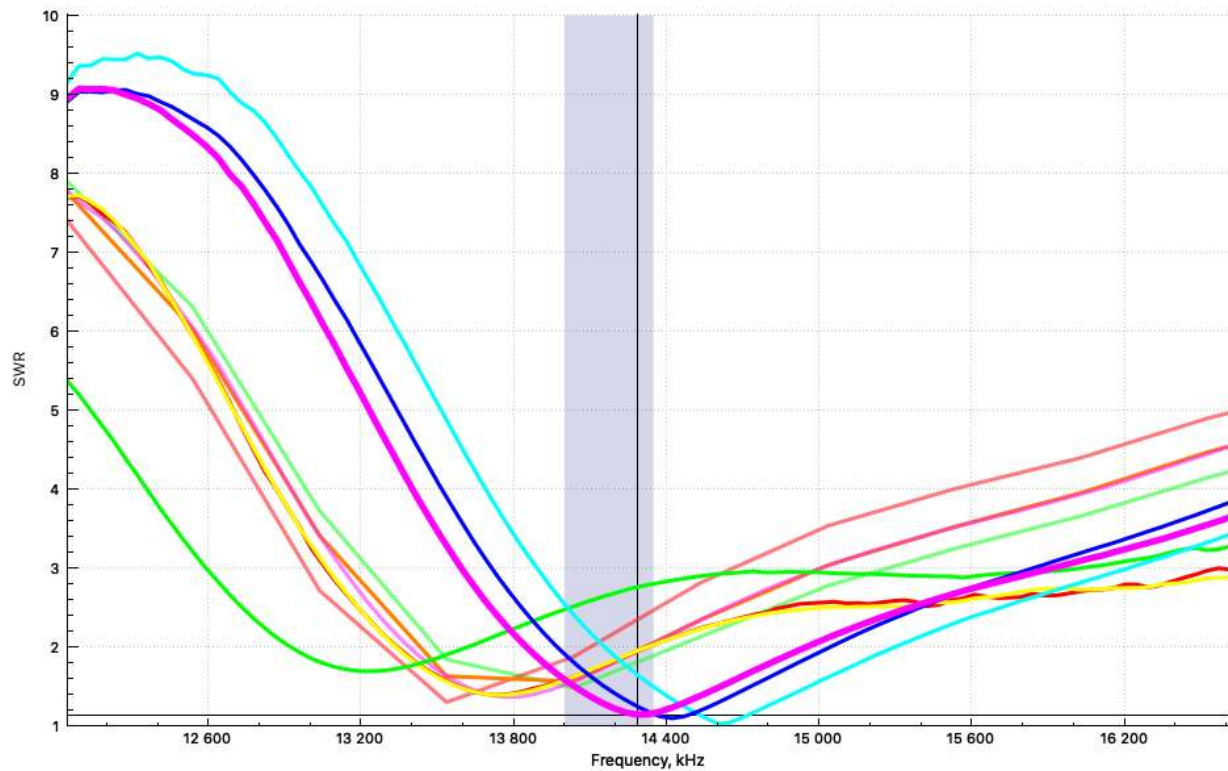
- 1--Sixty cycle AC or less, very rough and broad.
  - 2--Very rough AC very harsh and broad.
  - 3--Rough AC tone rectified but not filtered.
  - 4--Rough note, some trace of filtering.
  - 5--Filtered rectified AC but strongly ripple-modulated.
  - 6--Filtered tone, definite trace of ripple modulation.
  - 7--Near pure tone, trace of ripple modulation.
  - 8--Near perfect tone, slight trace of modulation.
  - 9--Perfect tone, no trace of ripple or modulation of any kind.
- If the signal has the characteristic steadiness of crystal control, add the letter X to the RST report. If there is a chirp, the letter C may be added to so indicate. Similarly, for a click, add K. The above reporting system is used on both CW and Voice, leaving out the "tone" report on voice.





## Antenna Analyzers:

I took a leap of faith and purchased an Antenna analyzer, I ended up with the [rig expert 35Zoom](#). After purchasing a [Buddipole Mini antenna](#) I struggled to get it resonant on some frequencies. This was also Elmer to me one night on the Tech net. So I was prepared for the additional expense. After using the antenna analyzer, I was really able to dial it in. I was also able to see what small adjustments have on the antenna while they were being made. Now with some additional support from Dave K6EV I was able to really see the functions on this device once I was advised to use the included computer software. These things are really amazing. The green line was the first reading. You can see how off it really is. The two Blue lines were targeted results.

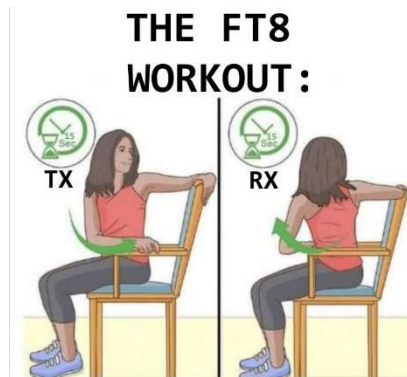




## FT8: Etiquette article found on DX engineering

For those of you who are using FT8 or are new to it. I got this email being on the DX engineering mailing list. It's a pretty good article that will explain the basics of FT8.

So, if you are looking for a quick read the link is: <https://www.onallbands.com/%ef%bb%bf-look-at-maintaining-proper-etiquette-in-ft8-mode/>



|        |    |      |      |       |        |            |
|--------|----|------|------|-------|--------|------------|
| 165331 | Tx | 1466 | -    | CQ    | KE6LKV | DM14       |
| 165345 | 35 | 0.1  | 1465 | -     | KE6LKV | N7JO DN17  |
| 165400 | Tx | 1466 | -    | N7JO  | KE6LKV | +35        |
| 165415 | 39 | 0.1  | 1467 | -     | KE6LKV | N7JO R-03  |
| 165430 | Tx | 1466 | -    | N7JO  | KE6LKV | RR73       |
| 165445 | 33 | 0.1  | 1466 | -     | KE6LKV | N7JO 73    |
| 165445 | 28 | 0.7  | 1530 | -     | KE6LKV | KD7JR DM33 |
| 165508 | Tx | 1466 | -    | KD7JR | KE6LKV | +28        |
| 165515 | 49 | 0.6  | 1530 | -     | KE6LKV | KD7JR DM33 |
| 165530 | Tx | 1466 | -    | KD7JR | KE6LKV | +49        |
| 165545 | 35 | 0.6  | 1530 | -     | KE6LKV | KD7JR R+02 |
| 165600 | Tx | 1466 | -    | KD7JR | KE6LKV | RR73       |
| 165615 | 33 | 0.6  | 1530 | -     | KE6LKV | KD7JR 73   |

Can you hear me now?

As many of you already know the WG6FZH repeater has been down. The goats have not been successful at contacting the owner of this repeater after several attempts. So, you will notice that our nightly nets are being held on a new Repeater with the approval from Hans Ehlert AE6TV. We all really appreciate the repeater owner allowing us to use his repeater for our nightly nets.





GOTA HAMS Store link <https://gotahams.com/sell-or-swap-radio-equipment/>

Hi Everyone,

Thank you for looking at the Radio Equipment donated to the Gotahams. We would like to auction the equipment to the highest bidder. All proceeds will go to Mike Horgan's widow, Sherry, to help her with expenses. The auction generated over \$2000. There is more Radio Stuff pictured on our website, [gotahams.com](https://gotahams.com).

As always, contact me with questions or comments.

Thank you for your help.

73

Kathi Mixon KD6CAF

[kd6caf@gmail.com](mailto:kd6caf@gmail.com)

**Upcoming events:**

Transmitter hunting



Hillcrest Park Fullerton May 8. Visit link below for details.

<http://www.homingin.com>





## Field Day 2021 June 26-27

Event Contest starts at 11am PT(1800 UTC) Saturday till 12:59pm PT(2059 UTC) Sunday  
We are still looking for volunteers. If you are interested, please don't hesitate to reach out to a GOTA hams member to inquire or you may email Kathi [kd6caf@gmail.com](mailto:kd6caf@gmail.com).

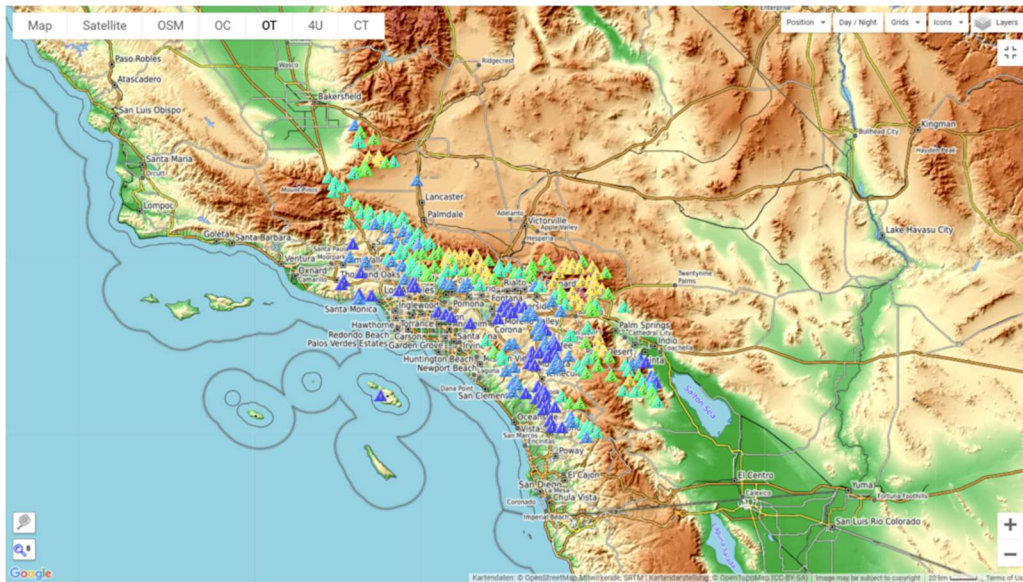




## Summits on the Air

There is a handful of members that are participating in SOTA activation. Anyone who is currently active in SOTA please feel free to email Mike Carlone (KE6LKV) [KE6LKV@GMAIL.COM](mailto:KE6LKV@GMAIL.COM) if you would like any pictures or info posted in the monthly newsletter sharing your experiences.

You may also check the GOTA hams website for information and links related to SOTA. <https://gotahams.com/sota-summits-on-the-air/>



## Websites

The Website, have you visited the Gotahams website recently? It has grown in the last couple of months, and we have added a 2021 Field Day section. Also, an area that explains repeaters, construction, operation, ownership, placement etc. We have added links to some of the Ham Radio “YouTubers” channels leading to many hours of content.

If there is not enough content on the GOTAhams.com site, you could visit the other website [tcarclub.net](http://tcarclub.net) which is edited/managed by me and hosted by Tim N6DLC. The site has some interesting content including “Building Your Shack” and “Project Plans” “Virtual Tours” etc. it has grown from a single page “Place Holder” webpage to over 100 pages of content, links, photos of a club that is nearly 100 years old.





Also, keep a close eye on both websites for news of Hamfests, Virtual and In-person. Soon the California State "Tier Levels" will allow us more freedom. GOTAhams will be returning to monthly "In the Park" events. Additionally, the Ham Radio swap meets will restart and of course GOTAhams Lounge will return to Claremont C.A.R.S. swap meet.

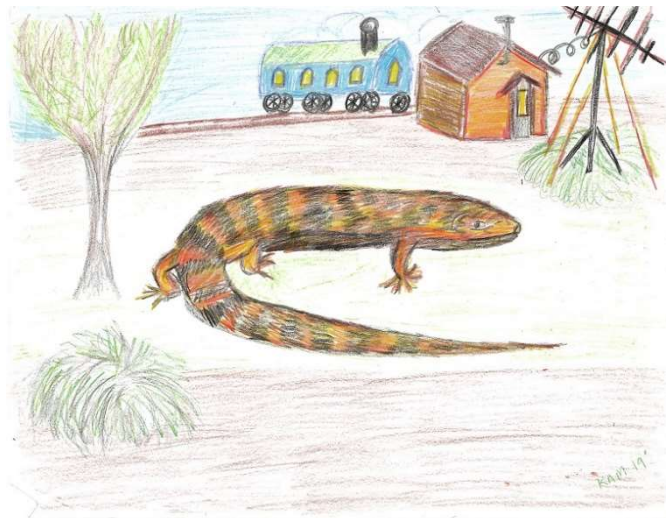
TCARA (Tri County Amateur Radio Association) is planning a monthly Field "build sessions" for DIY projects. There will be demonstrations of hands-on training with proper use of tools and methods for electronics and Ham Radio.

I am really looking forward to not only being able to get out, socialize in groups at many of these events but to actively promote these activities on both websites, social media and with other radio clubs.

If you have things you would like to promote on either website, please contact me, Ken Mixon at [kc6wok@gmail.com](mailto:kc6wok@gmail.com) or Mark Arlotti at [marlotti624@gmail.com](mailto:marlotti624@gmail.com)

### Lionel the Lizard by Kathi Mixon KD6CAF

Lionel Lizard lives in the mountain foothills among the evergreen trees and silver-tasseled scrub bushes. He makes his home in an abandoned telegraph shack where a tattered picture of Samuel Morse hangs on the wall next to Morse Code alphabet. A colorful ornamental railcar sits outside the window.



Lionel sent out his message, CQ, CQ, CQ This is Lionel L6ZRD QSL?







Lionel and Sally heard from their favorite radio club the Gotahams. They were at Cedar Creek Park in Eastvale practicing for Field Day 2021. They decided to pack a suitcase, crawl onto the railcar and travel to their next adventure.



When they crawled off the railcar at the park. Lionel and Sally were happy they spent the day at the park. A radio operator showed them a print out from a teletype machine. The printout came from a teletype machine from the last century. When they returned home they told all their friends about the exciting day at the park.

