



Southwestern REACTer



JANUARY 2022



YEAR OF THE TIGER



**SOUTHWESTERN
REACT, Inc.**

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OFFICERS

President: Roger McCollough
SWR 098

Vice-President: John Wright
SWR 042

Secretary: Jay Pistolas
SWR 046

Treasurer: June McCollough
SWR 054

Director-At-Large:
George Reeves
SWR 081

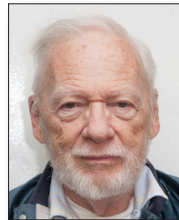
SWR's mission is to prepare for communications during emergencies and disasters. This preparation is accomplished through working community events such as: The Lakeside Western Days, and North Park Toyland parades, the Midnight Madness Bicycle Ride and Fiesta Island Time Trials, the Silver Strand Half-Marathon, the San Diego International Triathlon and the Descanso Endurance Horse Ride

The Southwestern REACT board meeting is held the second Thursday of the month at 7 PM on the Zoom application. Any member is welcome to attend. Contact us for the link.

The Southwestern REACT General Meeting is held the third Thursday of the month at 6:30 PM on the Zoom application. Contact us for the meeting link.

Reactive Team Net

The Team net is currently on hiatus.



Basic Computer Input > Results

By Roger McCollough, SWR 098, President

Simple Questions = Simple Answers

It's A New Year (Well, Yeah!)

It is time to hit the Reset Button and create a fresh start. Let's see what the computer says:

LESSON 1: Binary Decisions - Membership

For all the details you provide as information, computers only operate in a binary world; 0's and 1's, yes or no, left or right, high or low, etc... So let's look at this New Year. The method used by programmers to direct a decision path is the Flow Chart; a diagram of a "road-map" for the computer. Such a diagram would be too large for this article, but you can make one based on the following questions.

Program: Count 2022 Renewals

1. Can you contribute to the service that REACT provides?
If YES Go to 2.
If NO You don't care. Go to 6.
2. Did you renew your membership?
If YES Thank you for keeping us active and vital. Go to 5.
If NO Go to 3
3. Why did you not renew?
Lack of time or financing. Go to 4.
You don't care. [end program]
4. Do plan to renew later?
If YES - Hope to see you soon. [end program]
If NO - Thanks for your service. [end program]

Add 1 to Membership Counter: Go to 7

Subtract 1 to Membership Counter:
Go to 7

Go to Evaluate value of Membership Counter [another subroutine-not shown here]

This is an example of an imperfect subroutine (probably part of a bigger program) that could indicate probable success in a request for our services based on existing membership. I hope the intent of this example is not lost. As I have mentioned before, we need to remain strong to do what we do and maintain a reputation gained over the past decades. Computers do not make good members. Review of past AARs (After Action Reports) that shout out the value of qualified operators that are able to think on their feet and take good actions.

Maybe another subroutine might determine your level of pride of doing a job that helps or protects others and receive a sincere thank you. What does it take to make you feel good and appreciated? Seems to me that working with the Team, the Southwestern REACT Team, should be very satisfying once we are called.

Be Patient, Be Ready & Stand-By To Help

"Nuf said..."

LET'S GIT' ER DONE!!! ⚡

Southwestern React Board Meeting, December 9, 2021

Jay, Pistiolas, SWR, 026, Secretary

The meeting was called to order by President Roger McCollough at 19:01

Quorum Check – Four (4) Board Members, two (2) visitors (Jim Patterson & Cindy Jackson) George Reeves excused

General Meeting Minutes – Approved and accepted for filing

Correspondence List – Reviewed

Treasurer's Report – June reports an ending balance of \$5874.79 as of Nov 30th

REACTer Editor – John Wright indicates REACTer is out and posted to website

Webmaster – Website is current with e-mail address correction

Unfinished Business – Future meeting locations – For now, IHOP will be the place

DMV Trailer – John Wright will contact DMV re: missing trailer

New Business – Election results. Six ballots were returned

Post Events – None

Upcoming events – Koz Events has four in the works for 2022. Details to follow later

Meeting adjourned at 20:04 ✈

Southwestern React General Meeting, December 16, 2021

Jay Pistiolas, SWR 046, Secretary

The meeting was called to order by President Roger McCollough at 18:39

Quorum Check – Four (4) Board Members, Five (5) General Members, one visitor, Cindy Jackson

General Meeting Minutes – Motion by Carl Jensen to accept and ready to file

Correspondence List – Reviewed

Treasurer's Report – June McCollough reports an ending balance of \$5874.79 as of Nov 30th and 13 out of 19 renewals

REACTer Editor – Latest issue is out and posted to website

Webmaster – Updated

Unfinished Business – New Board Meeting place. IHOP will continue UFN
Trailer registration, no title located. DMV will be notified

New Business – Election results, January meeting to officially ratify the results

Post Events – None

Upcoming Events – None

Potluck Begins!

Meeting adjourned at 19:18 ✈

Using The International Space Station Amateur Radio Repeater

By John Wright, SWR 042, Vice-President

Nothing Like Having A Repeater In Space

Background:

On September 2, 2020 a cross-band repeater was activated aboard the International Space Station. Since then, amateur radio operators around the world have been using it to make long-distance contacts across the globe. These contacts have spanned nations and even continents. This adds a new, easy to use, phase of amateur radio.

Programming:

To utilize this repeater, it is necessary to program the proper frequencies into your radio. By looking at the website for the Amateur Radio on the International Space Station; <http://www.ariss.org/contact-the-iss.html>, we learn the frequencies for the repeater are as follows:

VHF/UHF Repeater Uplink: 145.990 MHz (PL 67 Hz)

VHF/UHF Repeater Downlink: 437.800 MHz

(The Uplink is your transmit frequency and the Downlink is your receive frequency.)

There are a couple of different ways to program your particular radio, depending on how it handles frequencies on different bands. Some radios will allow cross band split frequencies in the same channel and some will not. If your radio is of the dual-VFO variety, (Yaesu FT-8800R, FT-8900R, or FTM-400XDR) the process is simplified.

For a single VFO radio that allows cross-band splits, the process is as follows:

1. Open your programming software and locate an unused channel.
2. Enter the downlink frequency of 437.800 MHz into the Receive Frequency block.
3. Enter the uplink frequency, 145.990 MHz in the Transmit Frequency block.
4. Ignore the Offset Frequency block and ensure the Offset Direction block indicates "Split."
5. The operating mode should be FM and you can enter a name for the channel if desired. I used ISS REPT on one radio and ISSRPT on another.
6. Next is the PL tone. The Tone Mode should be set for "TONE" or "ENC" (depending on the radio.)

7. The CTCSS TONE frequency is 67.0 Hz.

Some radios do not allow cross band splits but are of the dual VFO variety. These are even easier to program for the ISS repeater.

Instead of programming a split into a single channel, they are programmed using two simplex channels. The process is as follows:

1. Choose an unused memory channel and enter the downlink frequency, 437.800 MHz, as a simplex channel. For naming, ISS DN works well.
2. Program an adjacent unused memory channel with the uplink frequency, 145.990 MHz, and PL tone of 67.0 Hz. This should also be set up as a simplex channel. ISS UP is a good naming convention.

When you have completed your programming steps in the software, write the new channels to the radio and you should be good to go.

The first example will operate in exactly the same manner as any other repeater. However, the second example requires a little more care. When setting up your dual VFO radio to use the ISS repeater, make sure that ISS DN shows on one side and ISS UP on the other side of the radio. Ensure that your radio is set to transmit on ISS UP.

Additional Considerations:

1. This programming is ONLY for the amateur radio repeater on the ISS. It is not for contacting the astronauts on the station itself.
2. You will need the use of a tracking application for the space station to determine when the station will be in range of your station. Because this is VHF/UHF, your communication will be line-of-sight only so the station has to be above the horizon for your location.
3. The typical dual band antenna that most of us have might be sufficient for a low angle pass, but if the ISS is directly overhead or close to it, a directional antenna would be better. With this kind of antenna you can experiment with different polarizations as well.

Good luck in your efforts. ✨