



A Fresno Amateur Radio Club Newsletter August, 2020 Volume 83, Issue 8



No physical meetings at the moment – stay tuned in on the club repeater! Meeting at 7 P.M. August 14 on the club repeaters!

**FARC General Meeting On the Air
Second Friday at 7 P.M. on the W6TO repeaters**

Join us on the air for our meeting July 10. As Joe, WA6FFJ, reminds us, the traffic during the meeting is pretty heavy, but he is protected, he has a mask on his speaker. Picture of Joe on page 5.

2020 FARC BOARD MEETING DATES
The 1st Tuesday of the month at 2 P.M., on the club repeater

FARC Nets
Morning Drive Time Net:
Weekday mornings-
7:30—8:00 a.m.
W6TO/R 146.940

FARC Net:
Sundays @ 7:00 pm
W6TO/R 146.940

Web page:
W6to.com

Join us on the second Friday of the month for an on the air meeting at 7 P.M.!



UC Merced center is closed for the rest of 2020. On the air meetings until the COVID 19 is under control.

From Ted, W6TLM

My term is up in December. Don't have any pictures of me sleeping. About all I'm doing right now.

Ted has served as a board of director member and treasurer of the club and wants to pass this job on. He follows the long service of Ron, N6MTS (SK).

So the nominating committee is looking for a candidate to take over this important job.

Four board member have turms that are up:

Ken WA6OIB

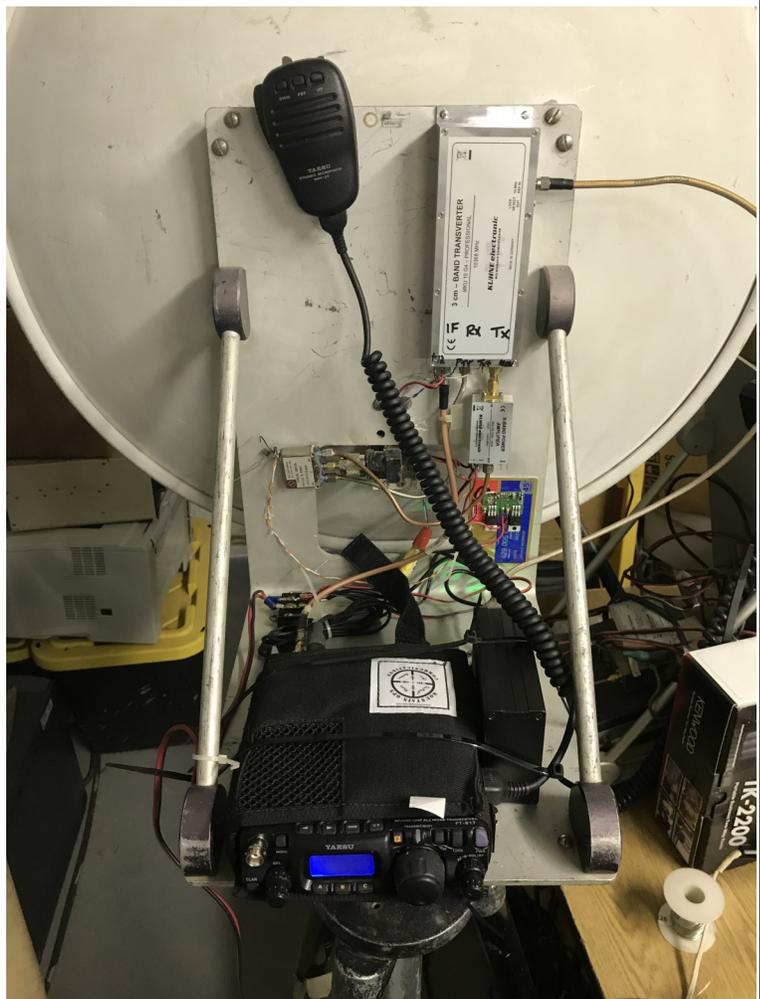
Ted W6TLM

Jim W6NIF

Larry W6OWL

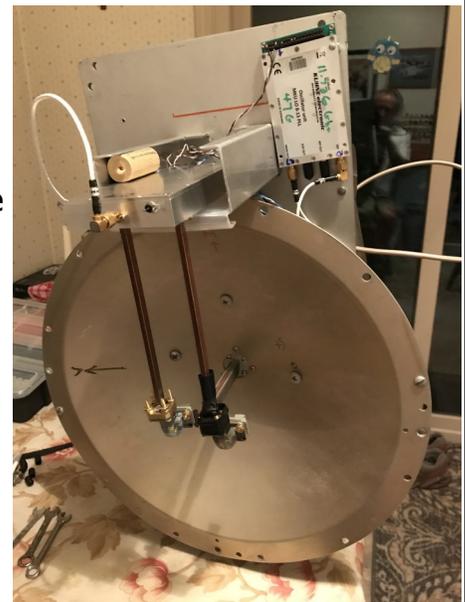
So far only Ted has indicated that they won't run again. But he holds an important position that does need to be filled.

If you are in a position to help out the club in this capacity, please talk to a board member.



This is the 10g, 24g and 47g project that John, K6MI has been working on, and hopes to use in the upcoming vhf-uhf contests.

The next vhf weekend is the second weekend in Sept., from 11 A.M. Sat. 'til 8 P.M. on Sunday, all on simplex frequencies.



FARC

Send your dues check to FARC, PO Box 5912, Fresno 93755-5912

Board meeting on the first Tuesday at Stu's place.

Fresno Amateur Radio Club

PRES SEZ

for August 2020

Happy August everyone! Gosh we have two things to celebrate: the 100+ temps and the Covid-19 virus. I say celebrate cuz we can all stay indoors, with the AC on full blast and work our radios as if we had good sense. Gosh, all this spare time! Brush up on your CW; work that far away station, read up on the newest stuff in electronics, read up and refresh your memory on old stuff; lots of things.

Someone suggested having meetings in a different place-the only problem is that brings a lot of people into a confined area, and that's something that nasty little virus really likes. So I say NAY to that idea. Let's take our time and remember we have NOT encountered this virus before, so there is NO natural immunity; its best to keep our 2 meter distance and wear the face mask. Hey, that mask does not hinder FM or SSB signaling!

Rumor has it the best liquid virus killer is Scotch Whiskey-so I will experiment with that. So far, so good.

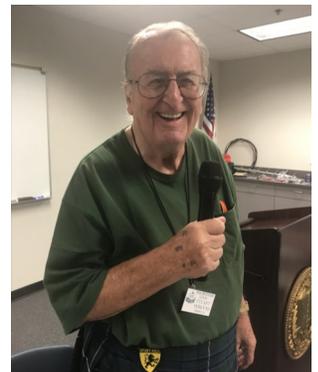
Yeah, I know we do miss that eyeball QSO at the meetings-and I miss the donuts! But I guess we all have to make a bit of a sacrifice now and then.

Well, keep calm. stay safe, and avoid improper contact. It will all be over and then just a happy memory!

Keep smiling-that way no one knows what you are up to!



'Til then, best of 73 to all Stu, WB6VRJ



This is Jim, W6NIF, who has served on the board of directors and as secretary of the club. Very active on hf and vhf, often on FT-4 and 8, he is very frequency agile and can go just about anywhere from vlf up through 1.2g.

He was active in FD in the 1d category with his wife Nora, WA6BDE, and worked a lot of stations on the recent 6m E cloud openings.

See his article on page 9.

AMATEUR RADIO EXAMS IN FRESNO

Exams given for TECHNICIAN, GENERAL, and AMATEUR EXTRA

Sponsored By the FRESNO VE TEAM

And The FRESNO AMATEUR RADIO CLUB, INC.

2020

Exams for all Amateur license classes will be conducted on the following dates in Fresno California. All exams are given on Saturday and begin at 9:30 AM.

All dates cancelled at this time, due to the location not being available.

LOCATION: ...St. James Episcopal Cathedral, 4147 E. Dakota, Fresno CA 93726

DIRECTIONS: This is at the northwest corner of Cedar and Dakota in Fresno. Enter the campus from Dakota. There is a large parking lot. Exams are given in Room 2.

Theory exams are multiple choice. First Class mail is used to send paperwork to ARRL, who sends data to FCC via electronic mail, thus assuring the fastest possible service on new licenses, which typically are posted to the FCC database by the end of the second week following the exam.

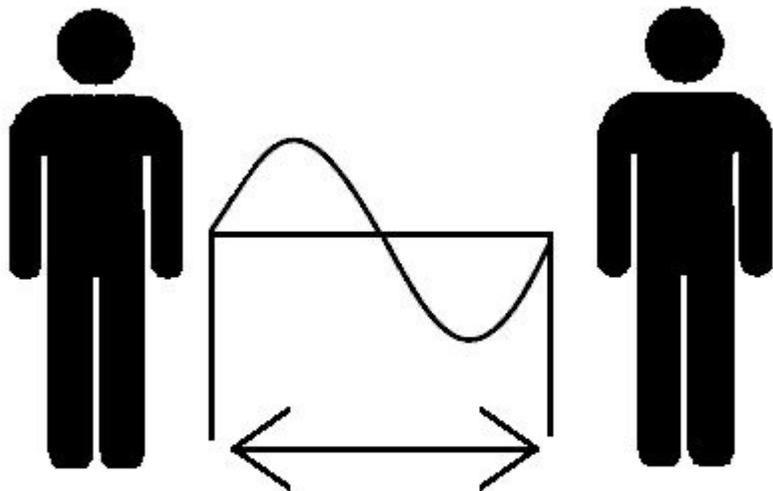
BRING. Two ID's, one with photo. Taxpayer ID Number (Social Security Number), or FCC Registration Number (**preferred**). Fee **\$15.00** per test session. Bring exact change. **Original and copy of Amateur License.** Talk in on 146.94 repeater.

Walk in's only, no pre-registration.

More Info?? Contact Charles, (559) 431-2038

Rumor is the virus is killed by 14.200 Mhz in large doses ????
Stay under your antennae my friends.

Social Distancing



**Keep one wavelength
apart at 146.52 MHz**

FARC BOARD OF DIRECTORS

FARC Officers and Board members:

Stuart Home, WB6VRJ President	wb6vrj@w6to.com	(559) 485-8659	12/2021
Ken Holden, WA6OIB VP	wa6oib@w6to.com	(559) 323-6753	12/2020
Ted Miller, W6TLM Tres.	w6tlm@comcast.net	(559) 431-1441	12/2020
Jim Erbe, W6NIF Sec.	w6nif@w6to.com	(559) 222-7524	12/2020
Larry Lion, W6OWL	larrylion2@outlook.com	(559) 227-5159	12/2020
Dennis Holloway, KI6NVG	dki6nvg@hotmail.com	(559) 323-7386	12/2021
Rob Egan, KM6SRR	egan@netpic.net	559) 868-2888	12/2021

Web master Aaron Lusk, K6USY k6usy@w6to.com (559) 301-1022

Skip Editor John Morrice, K6MI k6mi@pacbell.net (559) 275-7373



SEPT 1961

Who was three years old in 1961? This fellow is heard weekly on the W6TO repeaters! Tell him you saw his picture the next time you talk to him!

Send Skip items to Skip editor John Morrice, K6MI at: k6mi@pacbell.net

You can download this and past Skip issues under the Document Archive menu by visiting w6to.com.

Event-Date

Aug. 14 Fri. FARC Meeting 7 P.M.

Club picnic Sat. Aug. 15, 2020 postponed!

Possible club picnic on Oct. 10. Sat., or meeting on Oct. 9

Nov. 14. Sat. FARC Swap

San Joaquin Valley Nets:

The Noontime net meets on 7.268.5 MHz. This net handles a lot of messages.

The California Traffic Net meets daily on 3.906 MHz and 6:00 PM local time.

The Golden Bear Amateur Radio Net meets nightly at 7:00 PM local time on 3.975 MHz.

Northern California Net (NCN), the Section Traffic Net, meets nightly on 3.533 MHz at 7 PM Pacific Time.

San Joaquin Net meets Monday-Saturday on 3918khz, at 6 PM Pacific Time.

Western Public Service System (WPSS) meets nightly on 3952khz, roll - at 7:30 PM local Pacific Time.

The Mission Trail Net meets nightly on 3.856 MHz at 8:00 PM local time.

Northern California Net 2 (NCN2) The slow speed training session of NCN, meets nightly on 3.533 MHz at 9 PM Pacific Time. Handling traffic on CW is a good way to improve your CW skills.

Sunday and Wed. Night 2m Bozo Net, 8 P.M. 144.24 Mc. USB

Monday 220 Mc. 8 P.M. USB 222.1 Mc

Tuesday 8 P.M. USB 1296.1 Mc.

Thursday 8 P.M. 432.1 SSB net

Pacificon in Oct. is cancelled, but a virtual convention might happen!



Local Amateur Radio Repeaters

<i>Organization</i>	<i>Call Sign</i>	<i>Frequency</i>	<i>Offset</i>	<i>PL</i>
CARP	K6ARP	147.675	-	141.3
CARP	N6JXL	224.380	-	141.3
CARP	K6ARP	444.725	+	141.3
CARP	NI6M	440.350	+	141.3
CONDOR	WB6BRU	224.900	-	156.7
FARC	W6TO	146.940	-	141.3
FARC	W6TO	223.940	-	141.3
FARC	W6TO	444.200	+	141.3
BRA	W6FSC	145.230	-	141.3
BRA	W6FSC	443.450	+	141.3
KINGS ARC	N6CVC	145.110/444.95	-	100.0
NC9RS	NC9RS	927.6625/902.0125	-	146.2
MADERA ARC	W6WGZ	147.180	+	146.2
MADERA ARC	W6WGZ	441.175	+	146.2
QCWA	WQ6CWA	146.850	-	141.3
QCWA	WQ6CWA	443.250	+	107.2
RACES	N6HEW	147.150	+	141.3
SJVARs	KE6JZ	146.820	-	141.3
TURLOCK ARC	W6BXN	147.030	+	100.0
CVRC	K6WGJ Fresno Low	145.43	+	141.3
CVRC	N6VRC Meadow	147.165	+	141.3
CVRC	N6VRC Meadow	440.025	+	141.3
CVRC	N6VRC Santa Rita	147.285	+	141.3
CVRC	N6VRC Santa Rita	442.275	+	141.3
CVRC	N6VRC Visalia	442.525	+	141.3
CRVC	N6VRC Porterville	443.825	+	141.3
CVRC	K6WGJ Fresno Low	444.975	+	141.3
CVRC	N6VRC Bear Mt.	443.950	+	141.3
CVRC	N6VRC Mt. Bullion	442.350	+	141.3
CVRC	Bear	927.05	+	141.3
Meadow Lakes	WA6OIB	146.61	-	141.3
WA6IPZ	WA6IPZ	52.84	-	82.5

Ten meter net, CW and Phone, every Wednesday
7 P.M. for CW at 28.140

8 P.M. for SSB at 28.445

This is a local net, the cw part run by KF6ZXO, and the SSB with various net control ops.. Have fun checking in on one or both modes.

Remember to keep you dues current for both the attendance prize and the birthday and anniversary listings.

Birthdays

08/01 David KA6VTA
08/05 Joe WB6JQC
08/06 Ken WA6OIB
08/18 Dennis KI6NVG
08/18 Allen WA6IPZ
08/24 John KF6KCZ
08/24 Robert KF6HNL

Anniversaries

08/21 Cis & Bob W6AIY
08/25 Jamie N6PSB & Larry WA6ZBL
08/26 Norma & Ted W6TLM

The monthly attendance prize! Suspended until we meet again.

The attendance prize in March. was won by Elijah. Who was not present. Must be present to win. Next drawing will be \$20, when meetings resume.



THE DX CORNER

By Charles McConnell W6DPD

August 2020

Many DXpeditions are being postponed or rescheduled due to Covid-19 travel restrictions.

"DX is the one you want but you don't have. That is the way it has always been, that is the way it will always be."

Of the most recent DXpeditions, "If you worked it, it was the best DXpedition ever. If you missed it, it was probably not so good." "And so it goes."

All things are relative, some more than others. Thanks Hugh Cassidy, WA6AUD SK.

If you want help with DX, you can contact the local members of the Central California DX Club for some assistance. Charles W6DPD 431-2038, or Perry K6XJ 299-2802, can give you advice. The big thing about finding DX is to tune the bands.

The DX Breakfast is every Saturday at Jeb's Blueberry Hill Café, 3851 N. Blackstone Ave in Fresno. This group gathers about 06:30 AM. All are welcome.

Check out www.spaceweather.com and www.solarham.net for information on the solar cycle. The higher the solar flux and the lower the A and K Indices, the better the band conditions. As the solar cycle heads toward the minimum by the end of the decade, working DX becomes more of a challenge. The high bands become less useful until the solar cycle heads toward the maximum, some years from now. There were over 100 sunspot free days in 2017

The address of the Sixth District QSL Bureau is P. O. Box 970, Fairfax CA 94978-0970. You can send up to 10 address labels and \$0.80 for each envelope to the address above. They will put 1 unit of First Class postage on the envelope. You can contribute \$10 or \$20 online using Paypal. If you work DX, you should have envelopes at the bureau so you can get your cards. You may be able to check your status at the bureau at <http://www.qslbureau.org/>

The ARRL Outgoing QSL Service has **rolled back the rates** to those of 2011. The rate is \$2 for up to 10 cards, \$3 for 11 to 20 cards in one envelope, and \$0.75 per ounce for 21 or more cards. There is no longer a transaction fee. These changes began May 15, 2019.

Overseas postage is still \$1.15 per ounce. Domestic postage is \$0.55 for 1 ounce. Additional ounce for domestic mail will go from \$0.21 to \$0.15. Postcards stay \$0.35. Postage for flat rate boxes and envelopes will increase.

If you don't get a DX Bulletin and you belong to ARRL, you should register on the members only web page and check the box for the ARRL DX Bulletin. This one is emailed each Thursday. Or you can go to the ARRL web page in the News/ Bulletin section and view the bulletins there. You can also read the OPDX Bulletin or the 425 DX Bulletin on the web. Search OPDX Bulletin or 425 DX Bulletin to get the URL. You can subscribe to the Daily DX, or Weekly DX. These bulletins will keep you informed of DX operations and QSL information.

Scientists writing in NATURE magazine are predicting a Grand Solar Minimum beginning in 2020 are lasting for 3 solar cycles. Hopefully, they are wrong. NOAA Scientists predict the Cycle 25 peak will occur in July 2025 plus or minus 8 months.

Fresno Amateur Radio Club

Continued from the last page

The following operations are scheduled:

Sudan **ST2NH** is learning FT8 and is active
Bouvet **3Y0I** Will try in December, 2020
Djibouti **J28PJ** for 3 to 5 years
Ascension Island **ZD8AC** now for 2 years
Senegal **6W1SU** now for 2 to 3 years
Rwanda **9X0TA** August 5, 2017 for 3 years
Antarctica **VK0HZ** Davis Station for 1 year
Antarctica **ZL5A** Scott Base for 1 year
South Sudan **Z81C** now for at least a year
Ecuador **HC2PY** September 15, 2019 for one year
Chad **TT8SN** December 1, 2019 for 3 to 4 years
Seychelles **S79VU** September 30 to June 30, 2021
Andaman and Nicobar **VU4R** Postponed
Guantanamo Bay **KG4MA** June 2020 to March 2021
St. Pierre and Miquelon **FP/KV1J** September 22 to October 6, 2020
Easter Island **XR0YHM** August 7 to September 7, 2020
Ghana **G5GS** August 8 to September 15, 2020
St. Pierre and Miquelon **T05T** Postponed to next year
Greece **SX1AFM** September 1 to September 30, 2020
Corsica **TK20A** September 4 to September 20, 2020
Swains Island **W8S** postponed to spring 2021 due to travel restrictions
Malawi **7Q7AO** Mid September into October 2020
Faroe Islands **OY** September 15 to September 23, 2020
Niue **E6AM** September 28 to October 17, 2020
Chad **TT8RR and TT8XX** September 29 to October 12, 2020
Midway Island **KH6VV/KH4** First 2 weeks of October 2020
East Timor **4W** October 11 to November 8, 2020
Sable Island **CY0C** October 14 to October 28, 2021
Kosovo **Z66DX** October 15 to October 28, 2020
Tonga **A335GC** October 19 to November 2, 2020
Botswana **A25VR** April 28 to May 24, 2021
Jan Mayen **JX0X** September 15 to October 5, 2021
Chesterfield Islands **TK/C** Postponed until 2021
New Zealand Sub Antarctic Islands **ZL9** 2021-2022



Charles, W6DPD

Watch the DX Bulletins for up to date information. As the time for the operation is at hand, watch the DX Summit (www.newdxsummit.fi) for listings. There are a number of state QSO parties each year. Check the contest corral in QST or the ARRL web page. State QSO parties are a good place to collect states for your Worked All States award. Good luck, tune the dial, and listen.

Temporary Ham Radio Q-Codes for our times:

QLD: I am locked down.
QUA: I am quarantined.
QPD: I am in the middle of a pandemic.
QTP: I have toilet paper. Want to trade for a new car?
QFC: I am flattening the curve.
QHG: I need a hug.
QSH: I am sheltering in place.
QHS: I have hand sanitizer. Want to trade for two new cars?
QSD: I am observing social distancing.
QCV: I hate Coronavirus.



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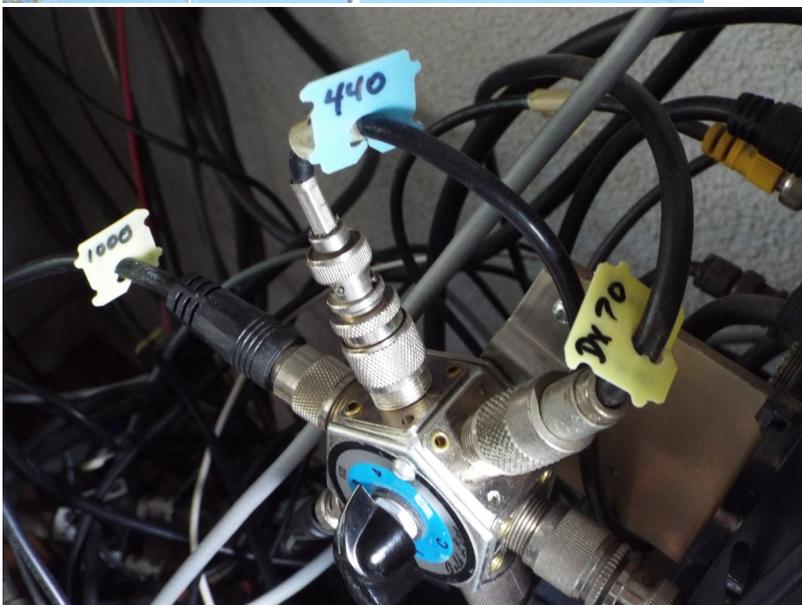
I found this little item in my Handyman magazine a while back...maybe a year ago!

What you have are the bread wrapper tags made of plastic. These make great small cable IDs instead of wrapping tape then writing on that. In the photos are these tags that I have been using inside and outside, such as where the cable comes into the house if you use RG8X, etc

I, myself, have maybe 18 cables coming in from the outside. Of course, some are RG8 or LMR type which I can't put these on but I do have some RG8X coming in. One is from my octopus antenna system shown. The 4 antennae are 80, 40, 20 and 15 Meter bands. The octopus use the Hamsticks for dipoles. I think KI6QEL just put one of these up.

Anyway, there you have it. Hope someone can use this idea.

73, Jim, W6NIF Always on FT8 or FT4.





The QCWA meets on the fourth Monday on 146.85 repeater at 7:15 P.M.

Ham Radio Mantra

We're all mostly stuck at home.

Let's do some radio therapy and have fun on the air!

Everyone works everyone and with stay-at-home there should be beaucoup activity.

Forty-eight plus days of fun.

Rules:

1. Stay away from people.
2. Wash hands frequently
3. Don't touch face.
4. Turn off TV news.
5. Take care of each other.

"This is Ham Radio" Film (vintage 1970 with excerpts from 1969).

Re-mastered by ARRL and officially posted onto YouTube in on 10/24/11:

<http://www.youtube.com/watch?v=nuIExTh4CF8>

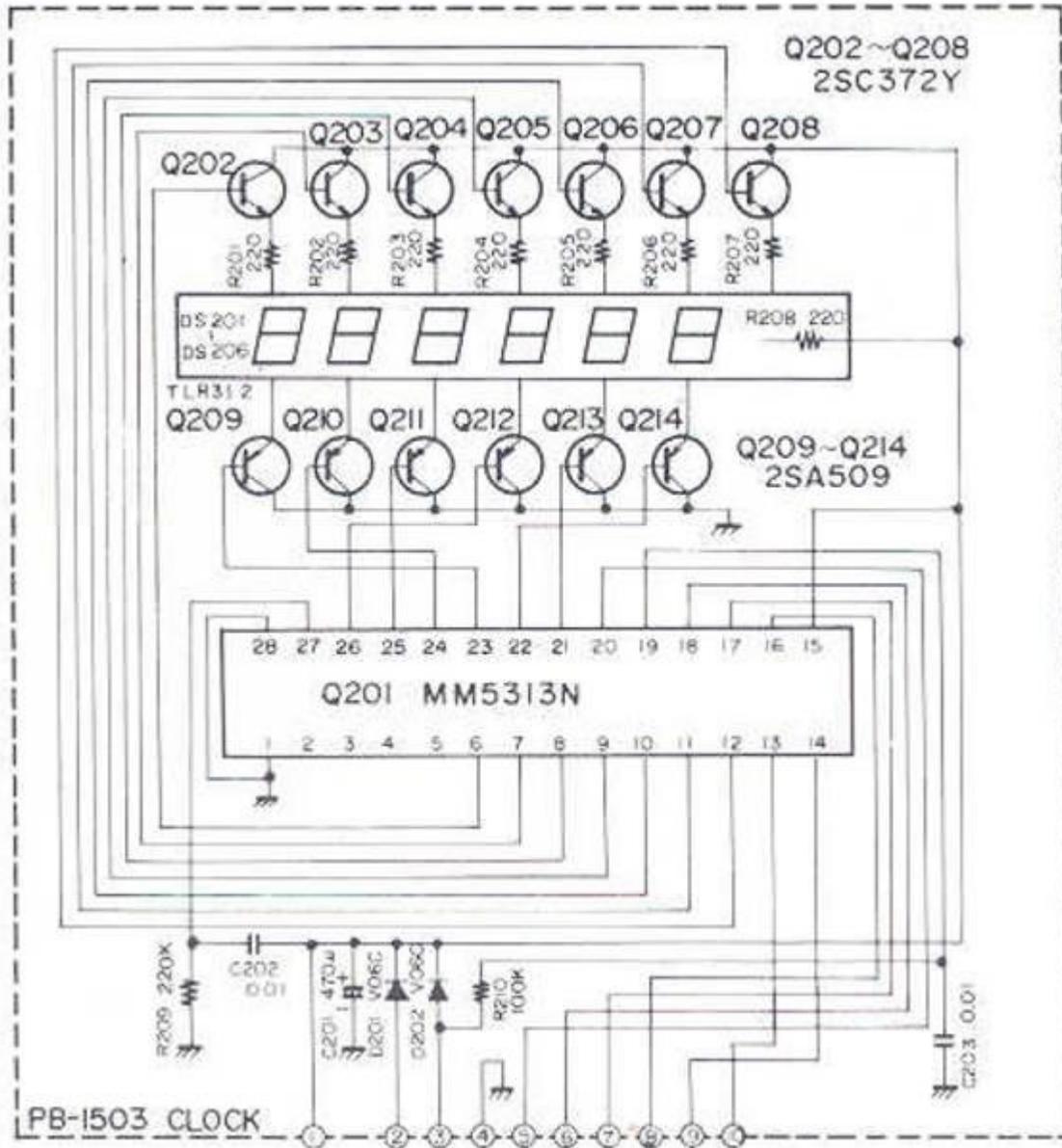
Operate Exuberantly!

We are amateur radio operators! We have been the masters of "virtual" technology for over a hundred years and have been leaders all that time in bringing the kind of instant, distance connectivity to the world that makes it possible in this moment for so much in our civilization to carry on, even when we are personally separated.

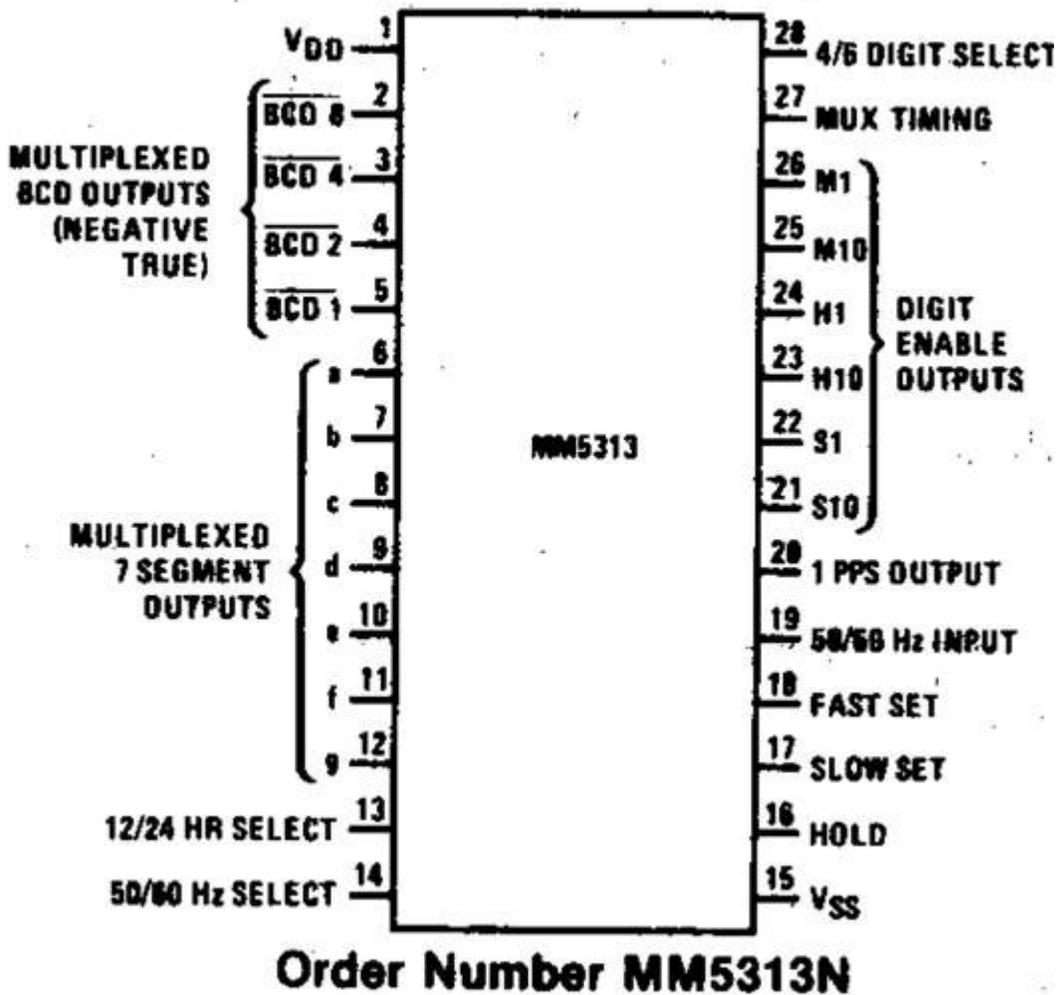
Finally got around to fix'n it... Lou WB6YFW

I have a modest ham station consisting of 2-meter transceivers and a used Yaesu FT-301D transceiver with a FP-301D power supply, speaker and it has a digital clock. The digital clock has had a missing segment on the 7 segment display that has been out since before I got the radio. Since it did not affect the transceiver's operation, I planned to fix it someday. Sunday afternoon I noticed it as I walked by my station. With nothing else happening decided to fix it. After all, how hard could it be... a two minute job... that... turned into four hours.

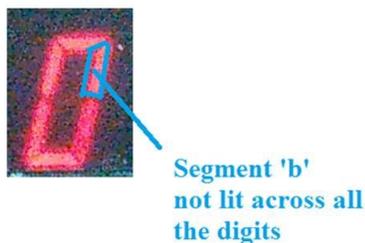
Why so tough? Here is the schematic from the manual on the web.



From National Semiconductor datasheet the pinout for the clock chip.



Here is a picture of the fixed 7 segment LED display showing the segment that was not working.



Since the 'b' segment was not working on all of the displays the problem was that pin 7 of the clock chip was not being driven or somewhere on the path to the displays there was a cold solder joint or a break in a trace. I know this because this is a time multiplexed display. The clock chip 7 segment outputs are connected to the same segment on all of the digits on the display. Only the currently selected digit is illuminated. The digit selection is done by the clock chip digit enable outputs. The next value for the 7 segments are then at the output of the clock chip and the next digit enable becomes active and that display is illuminated. This continues from the first to the last 7 segment display and then repeats. It repeats often enough to appear to illuminate all the displays with the current time.

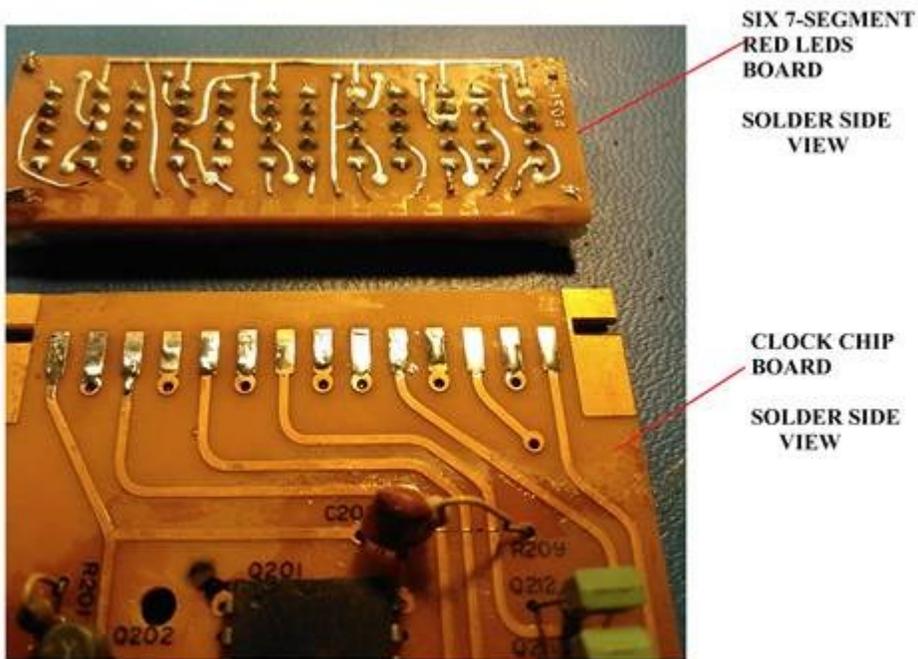
So, pin 7 of the clock chip drives transistor Q204 which then goes through a resistor, R203 and onto segment 'b' of all the 7 segment displays. Somewhere along that path or some part along that path is bad.

It seems someone before me made repairs. These repairs worked except for the one wire going from

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the clock board to the 7 segment LED board that... you guessed it... drove segment 'b'. What was disappointing was that these two boards were only held together by a flexible silicon strip and that the PCBs were of poor quality. The pads fell off with only a small amount of heat. Why didn't the designer at Yaesu use an epoxy or something that is not flexible? Why no brackets or mechanical means to keep the boards from rocking back and forth and breaking connections? OK, just fix it... solder a wire between the two boards and leave all else alone. Good thought, but not to be. After soldering the interrupted connection back together, powered it up and seeing it worked, I put it back into the chassis. OOPS, pushed on the LED board while installing it... broke some other connection, flexed the boards a little and it started working, let go and it stopped working... Arrrrr. Looks like it needs a better fix.

When I removed the clock board and the display board shown below, it was a mess of small wires and missing pads! The two cleaned up boards are shown below, that is, minus the wires and solder. All the trace damage and missing pads can be seen.



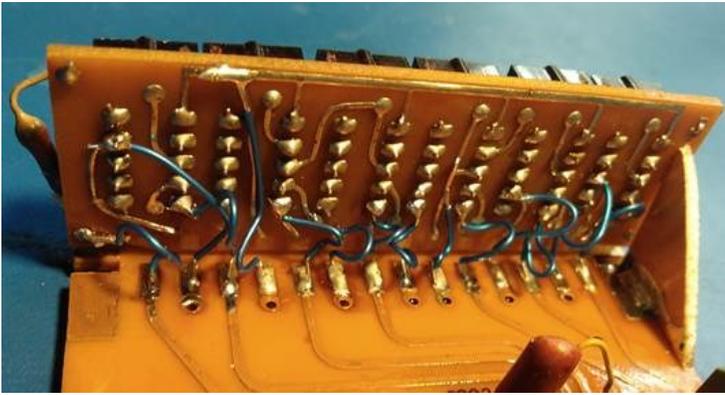
What now? How to fix it? The repair done before I got the unit used short wires that did not allow for any motion without breaking something. The display board has so much damage that any thought of adding a real connector between the two boards seemed overkill.

So, I took a breath and thought just get it working! Using 26 gauge, blue Kynar wire I connected the two boards together leaving a small loop in the wires so they could be flexed without breaking (at least a few times).



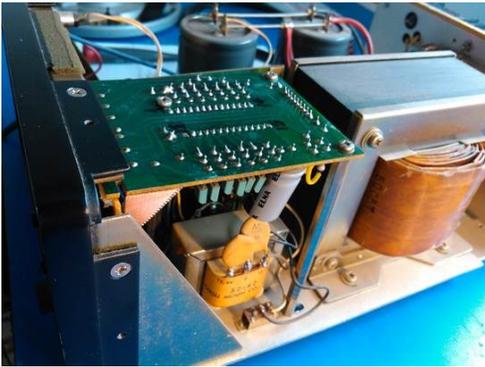
Next, I carefully bent/folded the wires so the boards would be at right angles and added a piece of copper clad (triangle) to act as a right angle stop. This is not how I would design a product, but who knows how much pressure for schedule and cost the Yaesu engineer was under at the time.

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is mounted on three standoffs.

Put it back into the FP-301D chassis where it



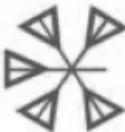
station.

Here it is working, connected to the FT-301D transceiver in my



73's Lou WB6YFW

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Anything to sell? Send info to k6mi@pacbell.net for next month's Skip

Your add or card here!
Talk to the treasurer about the yearly fee!

Mike, K6MYC, at a FARC club meeting describing a two element quad 2m antenna that will be easy to get on 2m ssb horizontal polarization.



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V.P. & Designer
K6MYC

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559.432.8873 Fax 559.432.3059 website: www.m2inc.com



For Sale:

From the N2NS estate, 20-6m Stepper beam, US-54 tower and rotator. \$3,000.

DX Engineering 80M vertical with radials, new in the box. Original price \$1500, for sale at \$700.

From the N6IG estate, 40 meter (with wire sides for 30, 20, 15, & 10M) DX Engineering 30' tilt over vertical with radials. \$50. New- 500\$

Contact John, K6MI for details 559-275-7373, or email at k6mi@pacbell.net

From: Jesus Larralde
<jesuslm@csufresno.edu>
Date: July 21, 2020 at 10:55:28 AM PDT
To: info@w6to.com
Subject: looking for SWR meter

I am looking to buy a used SWR meter in working condition. Please replay to this email address. Thank you, J.L.

I'm looking for a 2 mtr rig so i can get on roll calls name is marcus kg6qny is there anyway put it out there for wants? thks again to club KG6QNY
marcus93711@gmail.com

Fresno Amateur Radio Club

Renew now for the new year!

Fresno Amateur Radio Club (FARC) Membership Application

Name _____ Call _____ \$20 Dues ___ Date _____

Street Address City State Zip _____

Home Phone (____) _____ Cell Phone (____) _____

Email ADR _____ (for delivery of Skip Newsletter)

License Class _____ Year 1st Licensed _____

Birthday (Month/Day) _____ Wedding Anniversary (Month/Day) _____

ARRL Member? _____

Additional Family Member(s) in same household (\$5 each)

Spouse Name _____ Call _____

Son/Daughter Name _____

FRESNO AMATEUR RADIO CLUB, INC.
P.O. Box 5912
Fresno, CA 93755-5912

