

The Short Circuit

June 2019 since 1927 Volume 92, Issue 6

The June meeting of the United Radio Amateur Club will be held SATURDAY, June 1st, with the First Saturday Breakfast, 8 am at the Think Café (302 W 5th Street) in San Pedro.

2019 Museum Ship's Weekend:

June 1 and 2

Again this year, K6AA will participate in Museum Ships Weekend as *Army Tug Angeles Gate*. All K6AA operators are invited to participate. K6AA will be available during Museum hours: Saturday and Sunday from 10 AM to 5 PM





First Saturday Breakfast Program:

ARRL Field Day weekend is June 22 and 23rd. A discussion of who is planning to do what will be held. Think of what you want to do (operate, set-up and/or tear down, greet visitors, or ... bring a portable radio set and be a band captain.

Our secretary, Janet has arranged for us to share publicity with "Seal Day" at the next-door Marine Mammal Care Center.





Attn: Tech's upgrading to General ... Gary N6HMR

A gentle reminder, if I may ...

Change over to the new question pool becomes effective July 1st. You may continue to upgrade using the present General question pool until the end of June.

Need study material for the General Exam? Free ... from the URAC website.

<u>Learning about batteries</u> ... Dan Romanchik KB6NU

I often say that getting an amateur radio license is as much getting a license to learn as it is getting a license to operate on the amateur radio bands. Lately, I've been learning about batteries, LiPo batteries to be exact.

It all started when I purchased a Morserino (http://morserino.info/). The Morserino is a Morse Code learning aid that has a number of unique features. For example, in addition to helping you learn the characters, it's also supposed to help you learn how to copy in your head. It also has a built-in touch keyer function, and a LoRa interface that lets you send and receive code from other Morserino units.



I'll be writing more about the Morserino in a future column, but let's get back to batteries. The kit did not come with a battery. Instead, it was suggested that one purchase a 600 mAh LiPo battery com-



monly used for powering drones. I found this battery on Amazon , and purchased a six pack of them, thinking that I'd find uses for the other five in some project or another.

Well, sooner than expected, I did find another application for one of the batteries. I'm building a little Arduino project for a client, and I reckon that this, or one with more capacity, will make a great power source for the project.

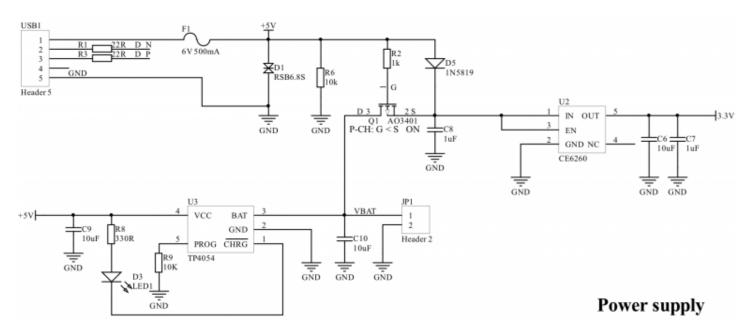
Now, I have two immediate challenges:

- 1. Figure out how to charge the battery, and
- 2. Figure out how to connect it to the Arduino.

On the Morserino, the battery plugs directly into a connector on the bottom of the computer board (the white board with the LED display). I knew that connecting the 5V line from the USB connector directly to the battery was a no-no, but I'd lent out the Morserino to a friend, and I didn't have the schematics for the board. So, how they managed to charge the battery from the USB port was a bit of a mystery.

Continued next page

I emailed Willi, OE1WKL, the designer of the Morserino, and he sent me a wealth of information. There actually is a battery-management IC, the TP4054, on the board:



He also gave me the part number for the battery's mating connector. He said, "The mating connector for the Molex connector on the battery is a Molex 51006. It is sometimes referred to by vendors as 51005 female, but 51005 is the connector on the battery." You can, of course, buy pre-made cable assemblies on Amazon (https://www.amazon.com/gp/product/B07P54QTR8).

You can also buy lithium battery charging modules (https://www.amazon.com/gp/product/B01LZSC7l8). These modules have a TP4056 on them, which is similar to the TP4054. It's amazing to me that you can purchase ten of these things for less than seven bucks.

So, that's where I'm at right now. Once I get the modules and cables, I'm going to hook it all up and get the Arduino system running from the battery. The next step will be to integrate a small solar panel and run the whole thing from solar power, hopefully.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.-Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and one of the hosts of the No Nonsense Amateur Radio Podcast (NoNonsenseAmateurRadio.Com). He often wonders if he can learn things fast enough.

Special Event Stations, June

- 06/01/2019 I Museum Ship Weekend Jun 1-Jun 5, 0000Z-0000Z, W5T, Cleburne, TX. Club KC5NX. 14.260 14.045 7.202 7.045. QSL. Club KC5NX, 9200 Summit Court West, Cleburne, TX 76033. Club KC5NX will operate as W5T during Museum Ship Weekend June 2nd and 3rd in honor of the USS Cleburne Attack Transport, APA 73, used during World War 2. Picture QSLs will be available for your QSL, or note and an SASE. club.kc5nx@gmail.com or www.grz.com/db/kc5nx
- 06/15/2019 I 78th Annual Convention of the National Speleological Society Jun 15-Jun 21, 1800Z-1800Z, K4C, Cookeville, TN. National Speleological Society. 14.285 7.195. QSL. Bill Frantz, AE6JV, 16345 Enlewood Ave, Los Gatos, CA 95032. www.nss2019.caves.org
- 06/15/2019 I W8DXCC DX Convention Jun 15-Jun 16, 0000Z-2359Z, K8S, Owensville, OH. SouthWest OH DX Association. 14.245 14.074 7.245 3.535. Certificate & QSL. AJ8B Bill, 8275 Cierra Way, Waynesville, OH 45068. This is the inaugural year for this DX Convention. We are using these call signs: K8S, K8W, K8O, K8H. A QSL for each and/or certificate for working all four. www.w8dxcc.com
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- 06/16/2019 I Providence Radio Association Centennial Event 1919-2019 "W1C" Jun 16-Jun 30, 0000Z-2359Z, W1C, Newport, RI. Providence Radio Association W1OP. 14.250 7.250 3.850 7.025. QSL. Providence Radio Association W1OP, 1 Ludlow St, Johnston, RI 02919. June combination special event. W1OP has activated the current Beavertail State Park since 1975 when it was still in US Navy jurisdiction. Will also be operating W1C from our clubhouse, built in 1952. These are part of the year-long W1OP/100 Centennial calendar. http://www.qrz.com/db/w1op or www.w1op.com

..... https://ke2yk.com/special-events/

~ June 2019 ~								
Sun	Mon	Tue	Wed	Thu	Fri	Sat		
						URAC /First Saturday Breakfast, 8 am Think Café, San Pedro Museum Ships Weekend, K6AA		
2	3	4	5	6	7	8		
9	10	11	12	13	14 Flag Day	15		
16 Father's Day	17	18	19	20	21	Field Day		
23 Field Day	24	25	26	27	28	29		
30								

K6AA Station We can still use more operators for our K6AA station. See Doug, W6HB, and or Scotty, K6ZNL, for training and checkout.

Check out the special events page on k6aa.org for the latest from arrl and e-ham net.

Additional Calendar Notes

Club Roundtable

Held weekly on Thursdays at 8pm 145.510 Simplex

Club Meeting

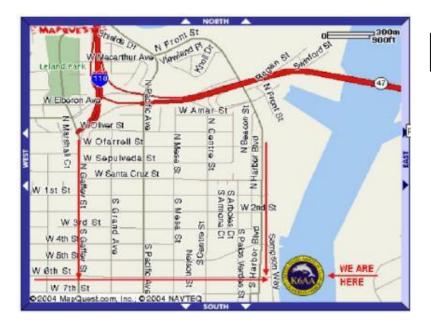
Held monthly on the 1st Saturday of the month in conjunction with our ...

No Host Breakfast

Held monthly on the 1st Saturday of the month at 8:00am. Location: Think Café on 5th Street in San Pedro

"VE/CE Session for Amateur and Commercial Licenses

Monthly on 1st Saturday **by appointment.** Go to http://k6aa.org/licensing-exams/ If no one schedules an exam, there won't necessarily be an exam team or exam material available.



The Museum is at the Foot of 6th Street.

