



### Some more exam questions.

1. The three terminals on a transistor are called.  
A. Base. Drain. Emitter.      B. Anode. Base. Cathode  
C. grid. Collector. Base.      D. Collector. Base Emitter
2. The formula to work out the Wattage of a load when you only know the Voltage and the resistance is.  
A.  $W = ER$ .      B.  $W = R \text{ Squared} \times E$ .      C.  $W = \frac{E \text{ squared}}{R}$       D.  $W = R \times 100 + E \text{ squared}$ .

**Answers later in the news.      hope U R correct.**

I was reading an article a while back about borrowing money to purchase a car, Interesting to note, having to repay money on something that has such a high depreciation level.

And my attention was drawn to the bible reference, Proverbs 22 verse 7.

Quote: - The rich rule over the poor, and the borrower is slave to the lender. Unquote.

Maybe that is why the banks make such huge profits. ED.

## CALENDAR FOR NOEL'S NUTTY CAMPS.

Please contact Noel via Email or his web site shown here, for more info.

**Email: [vk4nlnoel@gmail.com](mailto:vk4nlnoel@gmail.com)**

**<http://vk4nl3.wix.com/noelsnuttycamps>**

The next Tagalong is happening in July to coordinate with Christmas in July, for more details, and to book in for this event, contact Noel via the above contacts.

The nutty cruisers are off again, in January 2019 for a 10-day float to Vanuatu and islands.

The cruise leaves Brisbane on the 10<sup>th</sup> of January and returns on the 20<sup>th</sup>

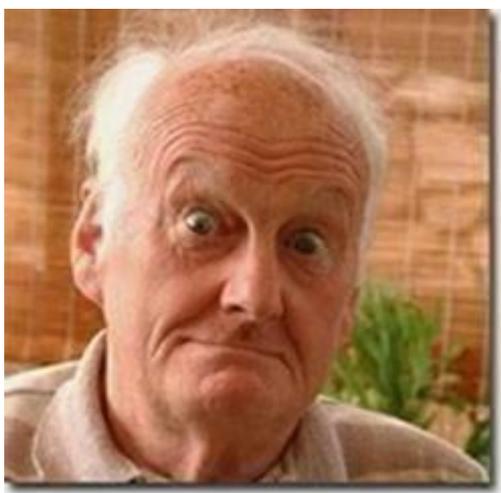
If you were wanting to go, if U R quick, you might get in but don't muck about.

There are two families going from the western downs, so it all sounds good.

oooOOOooo

### ***Update on the club's repeaters.***

**A few things in the plans here, these will be discussed further at the club meeting.**



**SOMETIMES  
I PRETEND TO BE  
NORMAL.  
BUT IT GETS BORING...  
SO I GO BACK TO BEING ME.**

myphotocomments.com

# Making your own Soldering Station

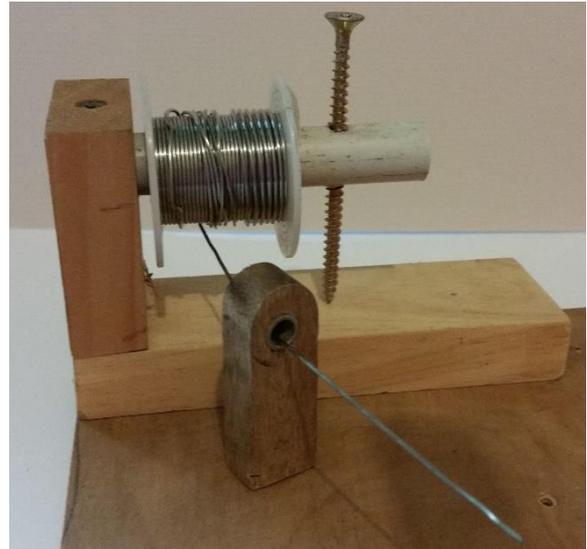
Article and photos by Tess Luckman (VK4TES)

Recently I wanted to work on some electronics projects using a microcontroller that I had been toying with for a few years but, never actually got around to using it. Sitting down at my hastily built iron stand I quickly determined that I needed to upgrade this well worn out relic from years gone by. Holding small wires and even smaller components in your fingers while you heat them up to I point that you can't hold on to them any more just didn't seem to be the fun as it used to be. Fired up and ready to go I made myself a list of features that I wanted to incorporate into the design and off I went.

First on the list was a way to support the iron and prevent it rolling off the work bench when put down. This was simply created from a piece of 42 x 19 mm pine with a semi-circular hole drilled in it before cutting the wood to length. This supports the handle but, for the tip end, this would obviously need to be something heat resistant as I didn't want to make a wood burner. I used an old metal bracket that I had salvaged from a project, thinking that I could use it one day. This bracket was already the perfect size and shape and could easily be screwed into my plywood base. The handle rest was also attached with wood screws from underneath the base to secure it well, once I had determined the optimal location.

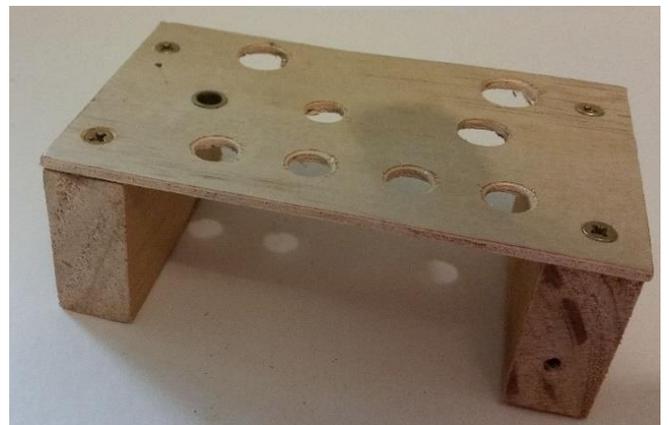


Solder was next on my list of things to mount. I cheated a little here as I had already made this roll holder in my previous stand, but I needed to modify it a little to suit my new (and improved) design.



The last one I felt was too low and often got in the way. I didn't want to totally redo the design, so I simply added an extra bit of the scrap pine I had to the underside of the vertical piece I had. I also fashioned up a solder strand holder. This makes it easier to pull solder off the roll when you have your hand full of other items. The extra-long screw there can be slid out to allow the solder roll to be removed and replaced on the short length of conduit I'm using as a spindle.

When soldering I always find that I want a tool that you never seem to have with you (or is that just me?). I made a very simple tool caddy design using 3mm ply and pine blocks as I change what tools I need from time to time I didn't want to make this too purpose built. Instead I made it rather generic so that different tools like files for cleaning joints, little screwdrivers, cutters, pliers, tweezers and the like could be placed here but changed without the need to re-do the hole sizing.



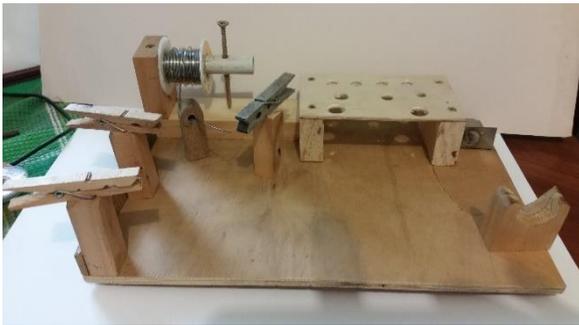
Now I wanted some way to hold onto the items that I needed to solder instead of using my fingers. A design that I've seen used over and over again from my Model making days, is a wooden peg screwed from the top into a piece of wood as shown.

The peg can be twisted 360 degrees get it at the right angle you need for project and generally having your peg mounted about 5 or above the work surface is usually high enough for most projects. I ended up mounting three (3) of these peg clams to the board.



to  
your  
6cm

Time to assemble everything together. I attached everything to my plywood base board with screws from underneath, this way if one item breaks or I come up with a new design I could swap that one item out without having to redo the entire project.



Once assembled I also decided that I should add a thin piece of wood between the pegs on the left. As I don't have a dedicated location for my soldering projects, I often will move this stand around and when soldering very small components, having that extra piece of wood there helps prevent items from falling off during transport from place to place.



I could have stopped here and I would have had a very functional homemade soldering workstation but, I don't know about you but I find that with

each passing year I find it harder and harder to see small parts without good lighting. Now most rooms have the ceiling lights in the middle of the room and unless you are going to use your kitchen table set up directly under the light, most locations you are casting a shadow on your work area. I wanted a good work light to help me ... well, see!

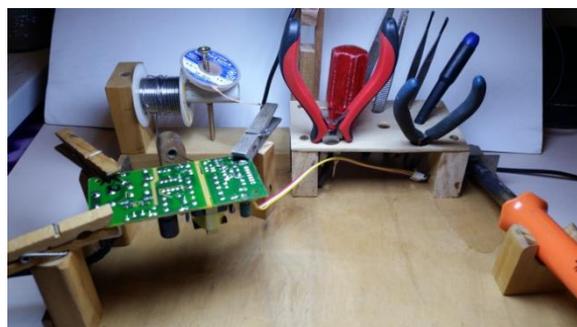
There are 240Volt work lights out there and if you like to shop online you can get them at half the price of a retail outlet but as I'm on a very tight budget and like the challenge of building things myself, I set about making my own.

Searching through my junk draws I came across some cool white LED strip lighting. This is great for illuminating a large area with a reasonable amount of light, like camping but, I wanted something intense and quite focused. This type of strip lighting can be cut at regular intervals of 3 LED and still be connected to 12 Volts DC without the need to make any further modifications. Now 3 LED's wasn't going to be enough light output so after some rough calculations of light output, estimated power consumption and a suitable footprint I decided upon a array of 9 x 9 LED's



Using some old 4mm bracing ply I had, I made a frame to mount these strips on, in nine (9) neat rows. Removing the pre-attached silicon from the ends of the strips to expose the copper track I soldered jumper wires to each of the negative terminals down one side and positive down the other. While there is access to both the positive and negative terminals at each end I decided that having all the wires at the same end made it too crowded and increased the chance of shorting the terminals together so, that is why I opted for the method I did.

Next I devised a method of positioning the light over the work area using the same design as most adjustable lamps would. This method also helps keep the centre of gravity over the base, preventing it from toppling over. **Page 4 of 7.**



Now for those of you who were paying attention you may have noticed that there are 3 wires coming from the LED's but I only said that I wire Negative down one side and positive down the other, where did the third wire come from? In my initial idea I thought it would be a good idea to have the ability to increase or decrease the amount of light that the lamp displays. So, I wired them in 2 groups.

Group 1 has row 1, 5 & 9 connected and group 2 has rows 2,3,4, and 6,7,8 connected together. My plan was to be able to have a switch arrangement that would go group 1 alone (Low light) ; group 2 alone (Medium Light) and then FULL which would be group 1 and 2 on at the same time. While this is still an option the reality is I do not now see the need for this changeability. In practice I only have it on FULL or not at all. The LED's do generate a little bit of heat but not much. I ran it for 4 hours continuously and the LED's were no hotter than they were 60 seconds after starting so overheating isn't an issue.

Now here you can see the finished results. The photos shown here are taken on a quite dark and rainy day, they are taken inside and without the use of the flash on the camera.

## Fundraising.

Yes, we continue our fundraising sausage sizzles on a Saturday morning, the next event will be this Saturday the 28<sup>th</sup> of April. Many thanks to those who continue to step up to the plate and volunteer for this important club activity.

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Members of the Darling Downs Radio club came out in force to participate in this year's John Moyles field day contest. Below are a couple of pics from this event that was held



I like that lounge chair. ED.

For the latest on licence courses and exams, over to John VK4TJ. are in order, for the following.

Congratulations

Mark Appo Stanthorpe USA Extra. Jacquie Uzzell Roma USA Extra. Darren Campbell Dalby USA Extra  
Wayne Anderson Withcott USA General. George Corney Toowoomba USA Technician  
Matt Hesse Brisbane USA General

Thankyou John for the update, well there you have it, if you know of anyone who is keen to obtain, an amateur licence, and the big challenge to all Foundation and Standard licence holders, brush up on your theory and upgrade to either Standard or advanced.

Contact John, VK4TJ, best done via Email, [vk4tj@hotmail.com](mailto:vk4tj@hotmail.com)

## Some of the Netts happening around the district.

Monday evenings. 1930hrs 2mt repeater VK4RET 146.675mhz 91.5tone. Tech nett  
Wednesday night. 1930hrs 2mt repeater VK4RET 146.675mhz 91.5 tone 2mt nett.  
Thursday night 1930hrs repeaters VK4REG, VK4RTQ. Scrub Turkey nett.  
Saturday night 1930hrs 3.650mhz LSB. Darling Downs radio club 80mt nett  
Sunday night 1930hrs 3.650mhz LSB Bunya Mts & District AmCom 80mt nett.

It would be great if all joined in to some of these netts occasionally

Page 6 of 7.

## Trail bike rides this year.

The Jandowae trail bike ride this year is set down for the weekend of the 15<sup>th</sup> 16<sup>th</sup> of October, please consider being involved in this event as you place these dates in your diary. All assistance will be most appreciated, more details as they come to hand.

We have no details at this point as to whether we will be asked to assist with the Bell event, watch this space for more details if they come to hand.

Many thanks for your interest in these events.

## For sale, give away or wanted

### WANTED, DETAILS OF PRELOVED GEAR THAT NEEDS A NEW HOME

YES, we have had requests for second hand gear, so if you have any such gear stashed in cupboards anywhere, bring them along to the Club meetings when they are on.

We place adverts in this newsletter free for members,  
non-members, we would appreciate a donation. ED.

*If you would like to add some copy for publication in the next issue of News in Brief,*

***please Email same to – [holmzie@bigpond.com](mailto:holmzie@bigpond.com)***

*Also, please keep in mind the size of your article, particularly when you have a few pictures included, I try to keep the MPs of the rag, below 5 mps.*

*Many thanks to all those who have contributed*

### Answers to the exam questions.

1.(D)            2. (C)

The Club would like to acknowledge all our most valued sponsors.

Dalby Home Timber and Hardware: 19 – 21 Rochedale Street Dalby

Condamine Electric Company.            Warrago highway Dalby.

Butters Warehouse.                        20 Eileen Street Dalby:

Evolution 2 Enterprises.

Please check website for more details.

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A chap once asked his Christian friend. Why do you follow Christ and his gift of eternal life???  
He simply replied,                                I am not very keen on the alternative

. Until Next time, enjoy your hobby. Neil Holmes VK4NF.-----Editor.