

The Official Newsletter of the Shire Woodworking Club Inc | Reg No Y2889524 | ABN 15 974 163 667
 "The Workshop" - 2B Turriell Bay Road, Lilli Pilli NSW 2229
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 Editor: 0408 240 514



- ✦ Show & Tell
- ✦ New CNC Machine
- ✦ Guest Speaker - Boat Restoration
- ✦ Australia II Model
- ✦ Austrian Wood Review

MEMBERS, your annual subscription of \$50 was due to be paid by 30 June 2024. If you don't have the Club's bank details for electronic transfers, please contact the Club's Treasurer, Alan Ritchie, on either:

- phone or text 0416 231 809
- email alan.ritchie@live.com.au

Maxi Day - 13 July '24

8:45	Open Lilli Pilli Workshop
9:00	Monthly Meeting
9:30	Ian's Videos
10:00	Morning Tea
10:30	Show and Tell
11:00	Leonie Le Cornu Custom Made Glass Design
12:00	CNC Machining - Alan Ritchie
12:30	Lunch
1:00	Raffle Draw

Maxiday Guest Speaker Schedule	
10 Aug	A Life in Aviation Engineering with a Touch of Ships & Submarines by David Edwards (Club Member) The Club AGM will be held on this date. Separate email advice to be issued
21 Sep	Maxi day moved back one week due to Council elections on 14th Sept. Speaker Michael from Norglas Specialty Finishes

If you would like to receive this newsletter or have an article / idea for the newsletter, please contact the editor via email on theshirewoodworkingclub@gmail.com.

MAXIDAY - 08 JUNE - SHOW AND TELL

Router Table

NEIL MATTHEWS .

I saw some router table parts on pintrest that consisted of an aluminium top plate and a cast aluminium frame underneath with height adjustments to mount a Trim Router.

I had an old piece of half inch plywood at home so I started to make a box. I decided to cut the edges 45degrees. I found it a problem to hold all four sides together to glue, so I cut 8 plywood triangles for top & bottom corners which made assembly easier & also provided mounting plates for top & bottom panels. These 20mm panels came from a piece packing from the club. Next, I needed a trim router so I went in line to see tests of routers. Two separate tests both chose DeWalt and Bosch as the best trim routers. I preferred the DeWalt, but found they were only available as battery units in Australia. This left the Bosch as the one I bought. I used it to successfully rout out the top panel for the aluminium plate. All looking good, so it was time to mount the Bosch to the frame attached to the top plate. The frame is 65mm diameter that suits every trim router on the market except Bosch which has a body diameter of 70mm. Since I had used the Bosch to cut out the top panel, I couldn't take it back. I bought a Ryobi trim router for \$99 & installed it OK, but it would not work in the router table. It has a "safety" feature that if you lose power while it is running, the tool switch must be switched off and on again before the tool will start. Back to Bunnings for a return & to purchase an Ozito, the next available router. Not my normal choice, but it fits & works "just fine". The dust collection system for the router table works great, and the height adjustment for small router bits like a 3mm round-over works as good as the expensive routers we have at the club.

Total cost (not including the \$340 Bosch) was: Router lift kit \$86.98, On/off switch \$41, Ozito router \$58.00, Dust extractor hood \$10.90, total cost \$196.88. --- Bargain!



Wine Rack

I needed a bottle holder to safely store some wine in a cupboard and decided to cut one out on the laser. Using my standard box design program (search boxes.py), I set the box dimensions to generate a file for loading into the laser software Lightburn. Using Lightburn, I modified the box top and bottom to cutout circles for the wine bottles and duplicated the finger joint sockets so that I could install another (middle) partition to support shorter bottles. The parts were then cut out of 7 mm plywood and assembled - the fit was so good that I didn't need to use any glue. I made one rack for home and one to sell at the Gallery. The design is customisable so I can make a rack whatever size a customer wants. If anybody wants one, please ask.

ALAN RITCHIE



RAY TREGONING

Boxes for Bandsaw Blades

I have two bandsaws which will have to go somewhere someday. I have spoken to my brother John's daughter, Michelle, at Mittagong who likes doing a bit of woodwork and she will take them (along with my old lathe down the track).

The blades for these machines were just hanging on nails and getting damaged now and then. These boxes make good storage for all the blades in the correct order.

One bandsaw is an Ezycut 12" made by Ezycut Tool Co Melbourne distributed by Atom Co Melbourne. This saw was Gayle's father Ralph's machine. He used it in the 1960's when he built his 17'6" Hartley Superstyle half cabin speedboat. He put it on a stand. It runs with a ¼ HP Hoover washing machine motor made in Cambuslang Scotland.

The other machine is a Macraft ½ HP motor made in 1985 in Taiwan and is a three-wheel machine benchtop model. This was donated to me by a gentleman (Richard Cain) who's not sure how it is used.

The boxes are made from Western Red Cedar all joined up pieces I used to get from my work in the coffin manufacturing industry. The moulding around the lid is Hemlock with an Australian Red Cedar insert for a feature colour. The lid is 4mm clear acrylic laser engraved with the bandsaw type and blade length which was then filled in with yellow acrylic paint



Trinket Boxes

KEN BRUNKER

The one in my left hand is Camphor Laurel made out of a single block with the grain running all around and over the top, while the inside is carved out to maintain 12mm wall around the outside and 15mm deep. Sanded all over to create the shape of a pillow, finished with 1000 wet & dry, polished in beeswax.

The second one is to store a keepsake coin for my God daughter made out of River Gum. Has also been cut from a very grainy block which polished up to a good lustre. The inside was machined out on a metal lathe to hold the coin raised up in the centre with a recessed circle around it to curl the chain.



WORKSHOP EQUIPMENT

Introduction to CNC Machining - Alan Ritchie

The Club has received a grant for a CNC machine and expects to purchase and install the machine in the next few months. This is an introduction to the proposed equipment and what it will do.

The CNC machine is basically a computer-controlled router. The router is mounted on a moveable gantry over the working bed of the machine in the same manner as our laser cutter /engraver. However, the control is in all three directions, horizontally and vertically so that the router can produce three dimensional objects.



The machine we are purchasing is an I2R model A24. It has a working area of 600 mm by 1200 mm, so can work on items up to those dimensions, with a vertical restriction of 150 mm.

It will be located under the mezzanine floor near the sign-in desk where the mezzanine access ladder used to be located. It will be fitted with an enclosure to reduce noise and contain any sawdust created during its operation. It will be connected to a dust collection system to remove dust as it is generated.

Many members have learned to use our laser machine. Learning to use this CNC machine will build on the expertise from using the laser and its software but adds several extra levels of complexity. With the laser there are only two settings that need to be considered, namely power and speed/feed rate. With the CNC additional settings relate to the amount of cut in each pass, the rotation rate of the router which depends on the router bit being used and the type of timber, and the final depth of the cut, for example whether you are cutting all or part way through your wood stock.



Make trays and signs



Inlay designs into cutting boards and other wood items



Carve intricate designs

Vcarve Pro will load these intricate designs (created by other software) but cannot create such designs.

Different router bits are used for different CNC outputs and some jobs required several different bits. The most common bits being used are:

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Website: <https://shirewoodworking.com.au/>

Facebook: Search for Shire Woodworking Club

1. End mills which are straight sided flat-bottomed bits to cut:
 - a) pockets - basically rebates of various depths, and
 - b) profiles - the outside of workpieces.
2. V bits to carve letters and intricate patterns and for making inlays.
3. Round bottomed bits for cutting the edges of the inside of bowls.
- 4.. Wide flat-bottomed bits for flattening surfaces of workpieces, and
5. Ball nose bits for detailed final pass carving.

WHAT YOU NEED TO KNOW

The process to produce a CNC wood product is made of several stages:

1 CAD (Computer Aided Design): The design is developed for our machine in software called Vectric Vcarve Pro. The club has obtained a licence for this software which will allow members to install the software on their own PCs at no extra cost, develop the design, save the file and bring the file to the club to be loaded onto a club computer. A club computer will also be available to do design work at the club. The Vcarve Pro software is basically a powerful drawing program able to produce three-dimensional diagrams. I can import two-and-three dimensional files from third-party providers. There are many suitable files available, some for free and some to buy. The Vectric website has many examples of files that could be useful.

2 CAM (Computer Aided Manufacture) – part 1: Once the design is finalised, instructions for the CNC are generated by Vcarve Pro. These instructions are called toolpaths, and a separate toolpath is needed for each router bit that will be used in the manufacturing process. One production run may need several different router bits. Each such toolpath is saved as a separate file.

3 CAM (Computer Aided Manufacture) – part 2: Each toolpath in turn is loaded into other software which drives the CNC machine. In our case, the software is called UCCNC which is installed on a computer attached to the CNC. This software drives the CNC.

LEARNING THE NEW SOFTWARE

1 CAD Software

Members who wish to be involved with our CNC machine will advise the club - see Alan Ritchie. You will then be registered by the club as a user of this software and emailed a link from Vectric allowing you to download a trial version of Vectric Vcarve Pro from <https://www.vectric.com/> You will need to create a Vectric login account. There is no cost for this account. You install the trial version on your computer - it only works on Windows machines, not Apple MacOS. This version is a special trial version which allows you to create files which open on the club's Vectric software computers. The files created on the standard Vectric trial software will not load on any computer other than the one on which the design was created. On the Vectric website there are many tutorial videos on various aspects of the software. There are many more videos on YouTube. I suggest you view some of these videos to get an understanding of how to use the software for designing projects. We will have some training time to help you gain experience. David Edwards and Alan Ritchie have been learning the software and will be able to give some assistance. There will be a limited amount of free training available from the CNC machine supplier.

2. CAM Software

Once the CNC machine is installed we will learn how to optimise and load toolpath files into the UCCNC software and operate the CNC.

There is so much potential for new projects which will become more complicated as we develop expertise.

PRESIDENT'S REPORT - JULY '24

The Shire Woodworking Club would like to thank the NSW Government for granting our application for funds to purchase a CNC Router machine. This item of equipment will be installed in the coming months and will enhance our capabilities and also will present a new challenge for members. Just like our acquisition of the Laser engraver, the CNC will create opportunities and will prove to be a very worthwhile addition to our machinery bank.

I would like to make members aware that the club has a serious issue with members using the Saw Stop Saw. No matter how many safety videos we have shown on Maxi days, the message does not always get through. During May, we had a period of 5 days where three cartridges were activated due to negligence. One instance occurred where a member actually touched the spinning blade as the blade was coming to a stop. The next two activations occurred due to members not concentrating and not carrying out a dry run before proceeding. Both times the Inkra fence was fed directly into the spinning blade. You are reminded that if the activation has occurred due to negligence the cost of replacement will be borne by the member.

We have a vibrant club that is continually evolving and I urge you all to use the various committees to help make improvements for the overall benefit of members. We are in a unique position where the club can contribute to our community with regard to charitable worthwhile organizations and we should be prepared to go the extra mile to help those less fortunate.

Happy woodworking

LIBRARIAN UPDATE



We have received issue 123 of the Australian Wood Review. This is an excellent publication full of very interesting articles and well worth a read. It is now available in the Workshop Gallery building :

Tools & Equipment - Levoite Drilling Guide, Felder Format 4 plan 51L Jointer, Nova Neptune Lathes & Arbortech Turbo Scraper.

Feature Articles - Making a 'Floating' Secret Drawer, History of Veneering for furniture making, Studio Workshop with Jono Everett, Working with Salvaged Timber, West Australian wood sculptor Olive Gill-Hille, Lighting the Way with Kara Ghasemiani and A New Award for Woodturning.



Check out pages 50-55 explaining the practice of 'Stereotomy'. Perhaps we could use these skills on our new CNC device



Some repair work done by Ray on Peter Hadfield's grandson's (Hunter) bike .

GUEST SPEAKER - KEN BRUNKER - BOAT RESTORATION

Ken provided us with the following general advice in terms of how to restore a boat.

Make a list of type of boat you would like, ie Putter, Dingy or Cruiser. Take a friend with you, someone who maybe knows boats or has an idea of timber repairs. Once home and/or in your friends garage, start to make a list of things to be done. All parts that have to be removed and colours, sort into separate boxes, this helps a lot during a reconstruction. The phone camera is good for this. You will need a good outdoor vac. You need a couple of good scrapers at least.

I have found paint remover messy and some leave a residue on the timber which will show up under varnish if you go that way.

All steel screws are rubbish. Just keep for reference re sizes. Replace with stainless steel. Most brass you buy today is rubbish. I have used a 2pack epoxy glue that was recommended to me by a shipwright. International epiglu expensive but good and another international pack of wood sealer was Everdure both from Whitworths.

From here on is a matter of how good you want the finished job to look. The more you put into it the better the outcome. Above all, dont be afraid to consult with a good shipwright if unsure.

Ken then explained his experience with restoring a Putter.

I asked a friend in the boat repair industry to lookout for an old timber boat that needed restoration. Damien knew me and what I would want. 12 months later he told me about a boat one of his tow trucks mates had seen when doing a job in Woronora.

My son Nathan and I went to check it out. One look told us the shape was right. It had an almost vertical stem and a wine glass look at the back, top 3 planks in clinker and the rest were carvel (edge on edge planking). This dated it to early 1900's.

The lady of the house told me it was her husband's and he was restoring it before he passed away. I made her an offer with a deposit so she talk it over with her son. A few days later and a couple of phone calls, we arrived with a trailer, met her son, paid the Lady, loaded up and off.

There had been an attempt at restoration but no further than replacing the deck and transom in Redwood, all went into the bin.

The son told us they came from Bundeena and his Dad used to take the whole family out on weekends often up to Audley with the little Chapman Pump Engine. They had been told that the boat was built in a shed in Burraneer Bay, Anderson's I thought.

It was 19 foot long and very beamy looked like it would slide thru the water. Had the original motor. I completely stripped it back to a bare hull and scraped it clean of all paint only to find 2 small sections of rot in the end of 2 planks and 1 short plank that we had a Shipright replace. There were no plans of the rebuild other than what was in my head, apart from a new motor and a total glass all over to finish off the hull.

The total job included new combing, front deck and transom, engine beds, floor supports and then floor. Then came the long bench seats to the curve of the hull while Nathan fitted the new motor, 4 cylinder Beta, new 1" stainless steel shaft and 4 blade prop, over this I built an engine box which was hinged to open as a whole unit or just used as a table top on it's own. I completed this with a dash board with glove box and room for a radio/cd etc. Nathan then went on to wire up the boat Nav lights, Mast light and bilge pump, new stainless steel fuel tank, isolating battery switch, forward & reverse lever with throttle control, from there we added new upholstery in the form of reversible long cushions.

In the water she performed as we thought, just glided through the water or lifted up the nose & powered on home in a hurry if needed.



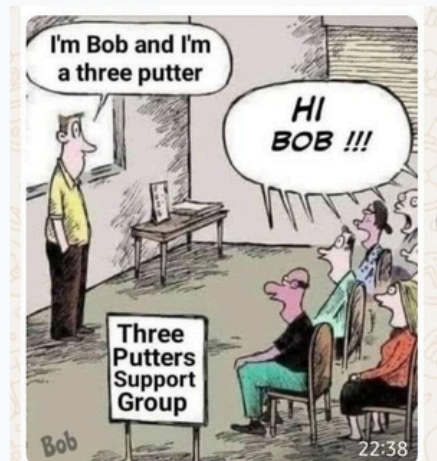
COMEDY CORNER



Neil Diamond has put his Volvo for sale on Ebay
~ Swede car online.

Why did Tiger Woods crash
into a tree and a fire hydrant?

He couldn't decide between a
wood and an iron.

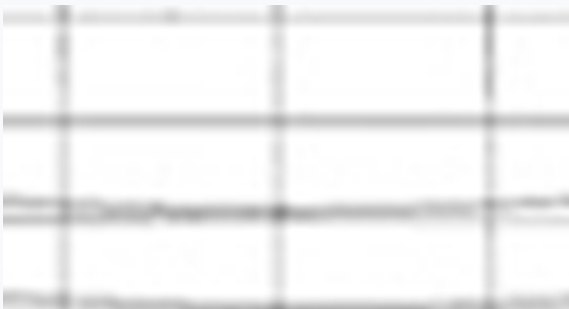


Graham Ethell saw this in the picnic area of a
cafe in Bilpin during a recent trip. Maybe a
project for a member who has an old tree trunk
in their backyard.

Detailed Plans For Alustralla II - Alan Ritchie & Ken Brunker

Ken Brunker was interested in making a model of Australia II, the yacht that won the America's Cup in 1983.

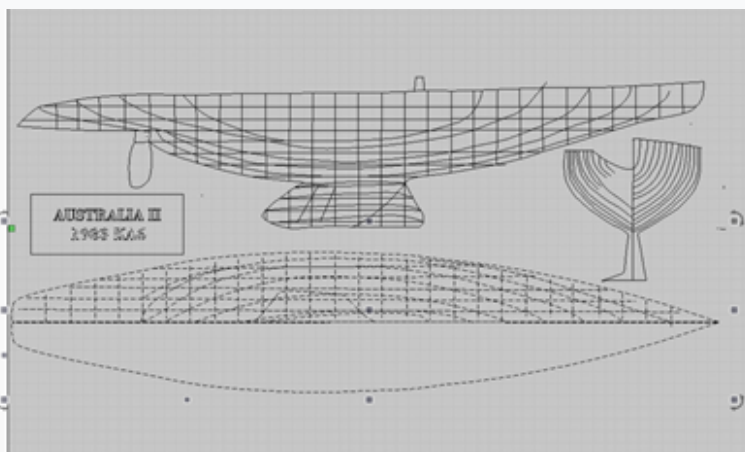
He wanted detailed plans to build the model 650 mm long. He had a detailed plan on an A4 sheet, but when it was enlarged, this yacht plan was unusable as all the lines in the drawing lost definition and were "fuzzy" – see the picture below. The plans at that enlargement were not useful.



He asked me if I had a way of enlarging the A4 into a form that was useful. I knew that our Lightburn laser software had the ability to convert a drawing, such as in a PDF file, into vectors that could be manipulated. I took on the challenge of creating the detailed larger scale plans.

I scanned the A4 page and generated a PDF file. When I imported and scanned the document in LightBurn, the result was only marginally better, and it would not be feasible to manipulate the result into useful output. I then imported the PDF into CorelDraw, an image processing software similar to Adobe Photoshop. The club has this program on both the Workshop laser laptop and the Gallery laptop for any club member to use. CorelDraw had a more powerful tracing facility than Lightburn's.

This tracing produced a file that I thought was a good start for editing in Lightburn. I imported this file into LightBurn and using the node editing facility I was able to clean up the file, straightening vertical lines and smoothing all the curved lines. I enlarged the file, so it was the size required by Ken and exported it from Lightburn as an .AI file for importing into CorelDraw.



I printed it full size using the CorelDraw poster printing facility. This generated a set of A4 pages that could be glued together to make the full-sized model yacht plans. Ken now has plans in sufficient detail to make his model. We look forward to progress reports.



Printed as a community service at the office of

SIMON KENNEDY MP
FEDERAL MEMBER FOR COOK



GET TO KNOW US MAURICE SMITH - CLUB SECRETARY

I grew up in the wild west of Blacktown, it was the end of the earth at the time. I have a younger brother and sister. All my schooling was in local schools. I was fortunate in that I enjoyed school and as a result I was able to attend the University of New South Wales Kensington campus where I studied accountancy with the benefit of a Commonwealth scholarship. Most of the study was on a part-time basis, working full-time. In due course I gained my qualifications as a Certified Practising Accountant. I joined Sunbeam Corporation (the electrical appliance and rural products manufacturer) as an accountant including numerous extended visits working in the New Zealand office which allowed me to see some magnificent parts of that lovely country. After my travels in New Zealand, I met my (first) wife Leonie and we married in 1975. While newly married I went back to Macquarie University to obtain a Master of Business Administration degree while working full time. We divorced in 1988 after producing 3 children.

After leaving Sunbeam I had a few shorter employment stints then I joined what was then Coopers & Lybrand (a large multinational accounting firm). I was in their accounting systems consulting group; here I found that this role was fantastic. I got to do a lot of travelling and working overseas and it was a great opportunity to learn.

In time Coopers & Lybrand merged with Price Waterhouse to become PriceWaterhouse Coopers. I transitioned from accounting systems consulting to project management. Once again, the intense intellectual challenge was highly stimulating.

Shortly after my divorce I was working on a large multi-year project in Hobart; and while there I discovered a passion for bushwalking which I continue to enjoy for several decades. Upon returning to Sydney from that project I joined two bushwalking clubs. Of course, due to my administrative skills I ended up on their committees. As an enthusiastic bushwalker I got to see some amazing country and made lasting friendships; in fact, I have a weekly coffee session in Cronulla with several other equally passionate bushwalkers. After retiring as a bushwalker, I took up recreational cycling and I met my, now, wife Connie on a day cycle ride. We married in 2011, a year to the day after we met. We have travelled extensively in Australia and various overseas destinations.

In the early part of the new century there was a major downturn in the consulting industry which meant that I left to become an independent consultant. I found a unique industry niche that I continued in until I retired in 2017.

Just after retiring I saw an article in the St George Leader newspaper about the Club and its Christmas toy deliveries to various charities. I cut that article out and tracked down the Club early in the new year. My journey as a Club member has been very extremely enjoyable. The development of skills in fine woodworking have been a major challenge for someone who was a rough and ready home handyman. By far the most enjoyable aspect of my membership is the social aspects especially the camaraderie of the members, the funny stories, the quick quips, the skills acquisition, helping newer members, toy making for the less fortunate members of society.



NOTICE BOARD



Birthdays in July

- 01 July Douglas O'Hara
- 14 July Ron Cameron
- 15 July Karianne Lafrance
- 16 July Greg Rose
- 21 July Peter Toby
- 25 July Malcolm Armstrong
- 26 July Ray Mallett
- 31 July Bruce Dowdell



SAFETY FIRST: Members are asked on all club days to bring along and use their personal safety gear. ie. hearing protection, dust mask, eye protection, ensure they are wearing good sturdy protective footwear and no loose fitting clothes.

New Members:

Dave Hughes

Olivia Cooney

Tom McBride

 **2024 CALENDAR**

Shire Woodworking Club 2024 Calendar

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**NEXT
MAXI DAY





10TH
AUGUST**

**TOY MAKING

25TH

JULY**

LEGEND

	Club Days - Every Tuesday to Thursday + Saturdays except 1st Saturday
	Committee Meeting 12:30pm - Tuesday, prior to 2nd Saturday. Note: Own projects catered for before & after meeting
	Maxi Day & General Meeting - 2nd Saturday.
	Toy Making Day - Last Thursday (Except April & December- 3rd Thursday) - No own projects

- Note: Last club day for 2024 is Saturday 21 December. Resume Thursday 2 January 2025
- Note: Minimum of 3 members present on any day to operate machinery. No exceptions unless for maintenance.
- Note: Wood carvers attend 1st Saturday + 3rd Wednesday (Evening)

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CLUB COMMITTEE, SUB COMMITTEES & AUXILIARY POSITIONS

President	Ian Rudd
Vice President	Malcolm Armstrong
Secretary	Maurice Smith - Ph : 0414 538 475
Treasurer	Alan Ritchie
Committee Member	Roger Dixon, Gary Healey Graham Ethell

Assistant Secretary	Roger Dixon
Assistant Treasurer	Roger Walsh
Project Sub-Committee	Ken Brunner, Ray Tregoning, Roger Walsh
Librarian	Roger Walsh
Safety Officers	David Edwards, Gary Healey, Axel Tennie, Bob Quigley
Welfare Officer	Malcolm Armstrong, & Kevin Gowen
First Aid Officers	Graham Ethell & Alan Ritchie
Newsletter Editor	Roger Walsh
Catering Officers	Richard Cain, Steve Lansley, Trevor Lewis, Neil Mathews, Lynn Messenger, Ray Tregoning, Axel Tennie, Roger Walsh
Equipment & Training	Roger Dixon, David Edwards, Neil Mathews, Kevin Gowen, Gary Healey, Ray Tregoning, James Windschuttle
Raffles	Gary Mitchell
Exhibitions Sub-Committee	Graham Ethell
Property Sub-Committee	Graham Ethell & Alan Ritchie
Toymaking	Malcolm Armstrong, Barry Gardner, Steve Lansley, Maurice Smith
Facebook	Alan Ritchie
Webmaster	Maurice Smith
Woodcarvers' Liaison	

USEFUL WEBSITES

1. RobCosman.com
2. Paul Sellers.com
3. Epic Woodworking
- Tom McGlaughlin.
4. Wood and Shop
5. Wood by Wright
6. Andy Rawls
7. EN Curtis
8. Mathew Cromona
9. Mitch Peacock
10. Mitch Cremona

Thanks Mike Green

Free Vector Files for Laser and CNC

<https://www.freevector.us/>

Box Designs for Laser

<https://www.festi.info/boxes.py/>

<https://en.makercase.com/#/>

Woodworking Tips and Plans

<https://www.woodcademy.com/>

<https://canadianwoodworking.com/project-plan/>

Thanks Dave Edwards

search youtube for "how an engineer breaks an egg"

Ref youtube.com/watch?v=gYcF9ELNW6U

[v=gYcF9ELNW6U](https://youtube.com/watch?v=gYcF9ELNW6U)