THE MOSTLY MONTHLY NEWSLETTER OF THE

EUGENE 5160 CLUB ~ JUNE 2018

https://www.facebook.com/5160Club newsletter archive: http://www.elementalforge.com/5160Club/

JUNE MEETING

Thursday June 7th – 6:00pm at David Thompson's shop. If you didn't get the directions in the meeting notice, email me for them: michael@elementalforge.com

Bring your show-n-tell!

Request from the Thompsons:
"Please **drive very slowly** down our lane. The maintenance is all ours. Thanks."

NOTES AND REMINDERS

***

Northwest Blacksmith Association – Intro Blacksmithing classes Portland, OR & White Salmon, WA; SwaptoberFest October 26-28 Longview, WA http://blacksmith.org/events/

***

California Blacksmith Association puts on a slew of events to the south of us. Check out their list: http://calsmith.org/CBA-Events

***

Bent River Forge aka **Farrier Supplies** – north of Monroe, OR has blacksmithing tools and supplies and ongoing intro to blacksmithing and other classes: https://www.facebook.com/FarrierSuppliesOR/

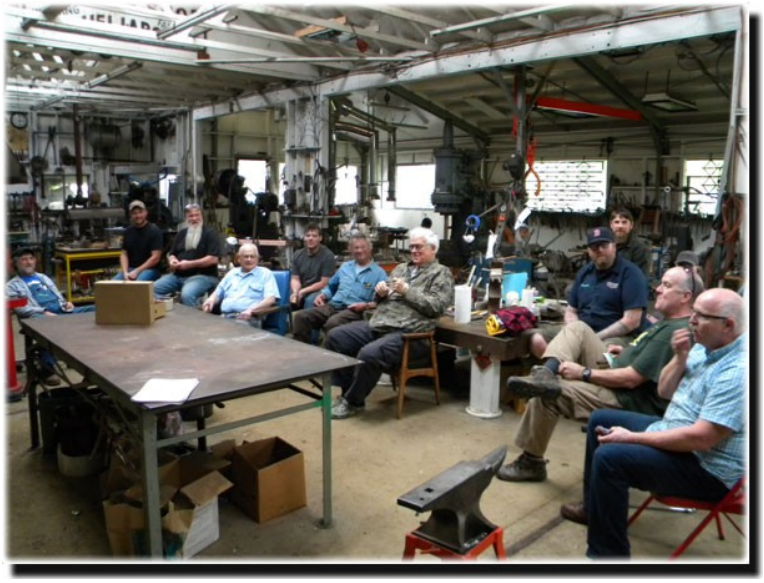
***

David Thompson – has coke and coal for sale (near Jerry's in Eugene, OR) – Talk to him at one of our meetings or call 541 688-2348.

***

Blade Show West returns to the Portland Convention Center on October 5-7. A table goes for $350.

MAY MEETING NOTES



MIKE JOHNSTON *covered for me at last month's meeting while I was recuperating from some chest-n-head cold that just would not let go – many thanks!*

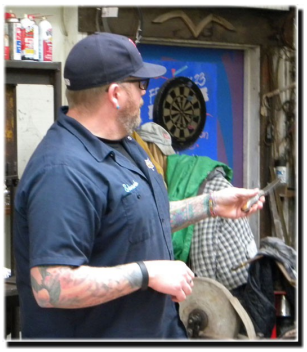
Here are his photos and notes:

Our meeting was called to order promptly sometime shortly after 6PM, at which time we had a pretty good crowd. Those who arrived a little early were treated to donuts brought in by Shannon. They didn't last long.

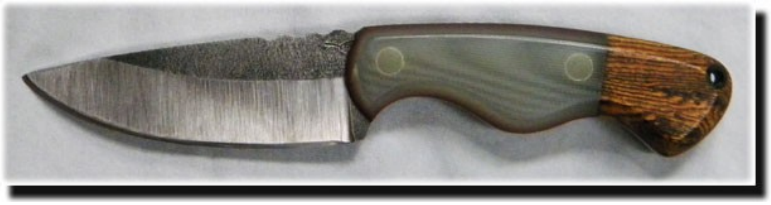
There were several people who came in a little after the meeting started to make it an even larger group. For the new people, I explained that there were no rules for the group and that things were run informally. I did however ask that when presenting Show and Tell items that the presenter introduce themselves and hold their items up for the group to see while talking about the items. There was a comment that this sounded a lot like a rule.

From there on the anarchy truly began.

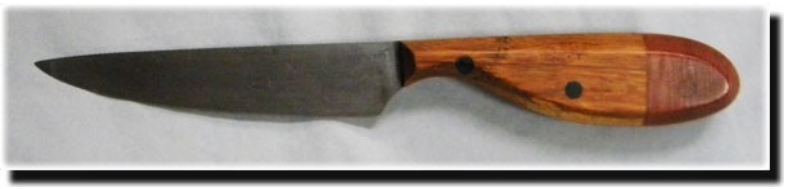
Not having the use of a video recording of the meeting made it much more difficult to capture all the detailed descriptions of the knives everyone presented. Hopefully Michael will be back for the June meeting so we will have a more accurate accounting.



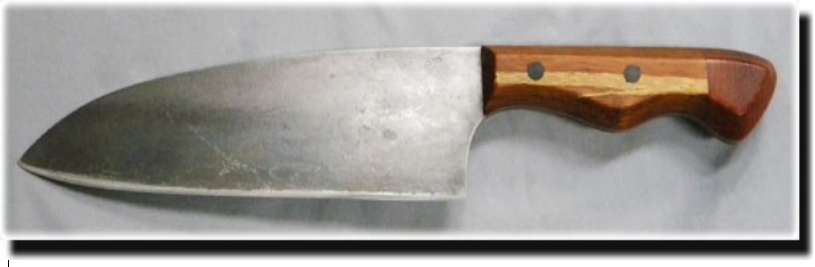
BROCK started off the Show and Tell by presenting three new knives he had worked on recently. The first was a full tang drop point hunter with a saber ground blade. The blade was a CPM product but I didn't catch the numbers. The HRc was right around 61-61 1/2. The handle was zebrawood and some form of Micarta?



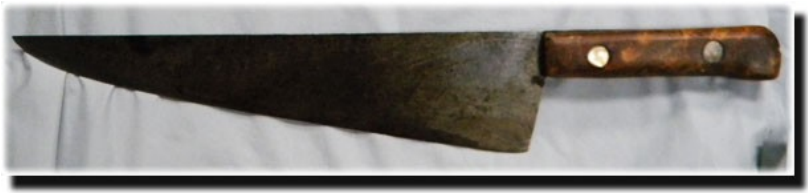
The second was a small kitchen knife from 15N20 steel. Brock said he was trying out newer ways to make the handle more ergonomic. He also said he was working on several different types of blade finish techniques on this blade just to see how they worked.

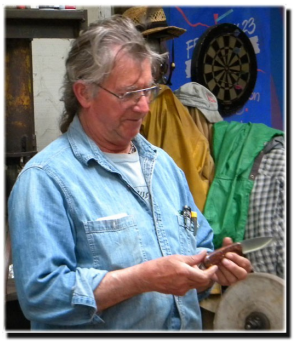


The third knife was a kitchen cutter that he described as not quite fitting into a specific Japanese style, so it was his own style. The blade was of a piece of bandsaw steel that was brought into the 5160 Club. Brock said he treated it like 15N20 with a result of 60Rc when the tempering was completed. Lynn commented for the group that most large bandsaw blades used in logging mills were 15N20. Since Brock's wife was not fond of the octagonal design of the Japanese cutlery handles, he made this handle in a more western style from bamboo and another wood.



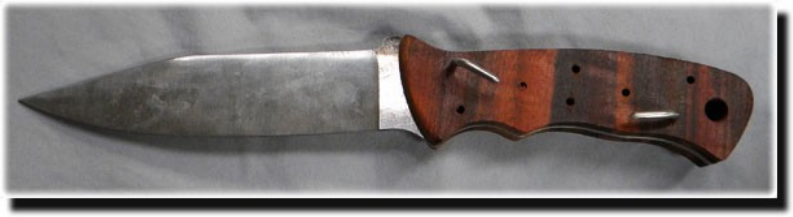
CRAIG MORGAN, our OKCA President showed us two examples of commercially made large kitchen knives he found at a garage sale. He said the lady hosting the sale was quite elderly and told him she had the knives for quite some time. When asked how old the knives were, Craig said just gave a little smile and wink. One of the knives was marked "KA-BAR" and he thought the other was made from an old bandsaw.



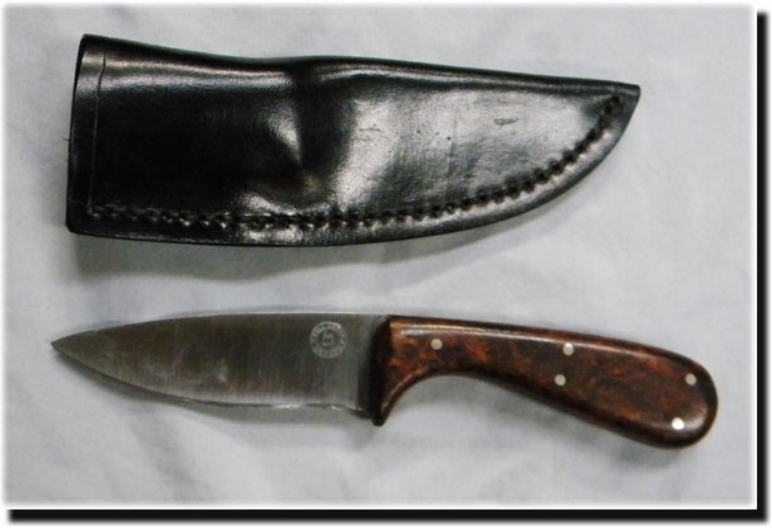


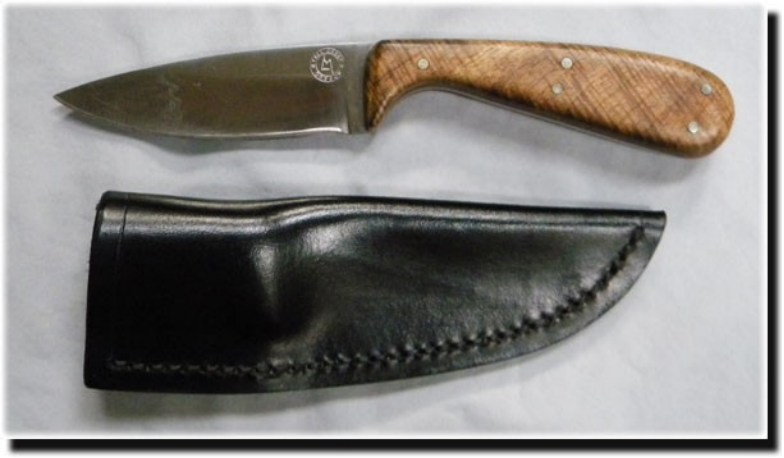
LYNN MOORE showed us a knife he was working on for Dennis Ellingsen who would use it as a gift for the person who had been so gracious to supply Dennis with the bandsaw steel and Micarta

that the 5160 Club has received over the years. The knife was ground from a thick/heavy saw blade with a full tang. The wood for the handle was cut in an interesting grain direction (I will have to try a variation of that idea) and had a pleasing pin pattern and lanyard hole, though there were only two temporary pins in place.

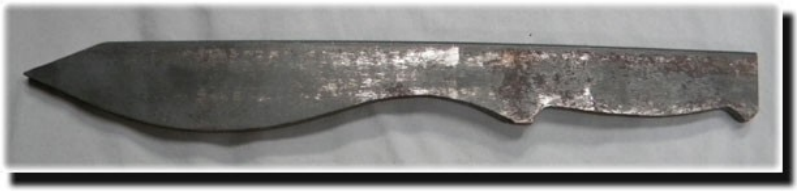


The next two knives were small drop point hunters made from saw blades. One had desert ironwood scales and the second had scales of stabilized myrtle. Lynn said he made the form fitted pouch sheaths for each.



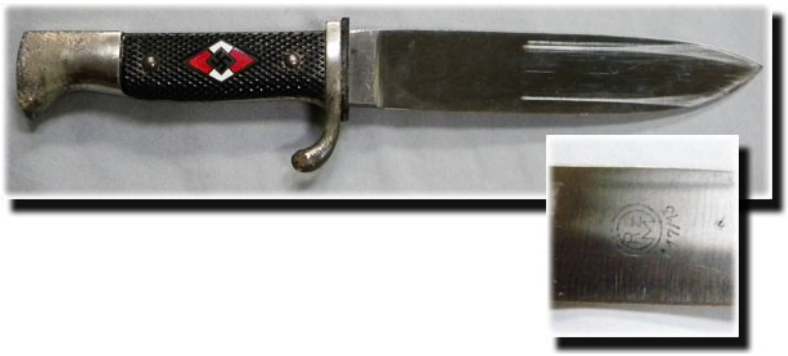


OLIVER started his journey into knife making by buying some steel from McMasters Carr that they recommended for making throwing knives. After cutting out several blanks in a recurve blade pattern with a short clipped tip he had set them aside for some time. We would like to see the final result, maybe even a throwing demonstration?



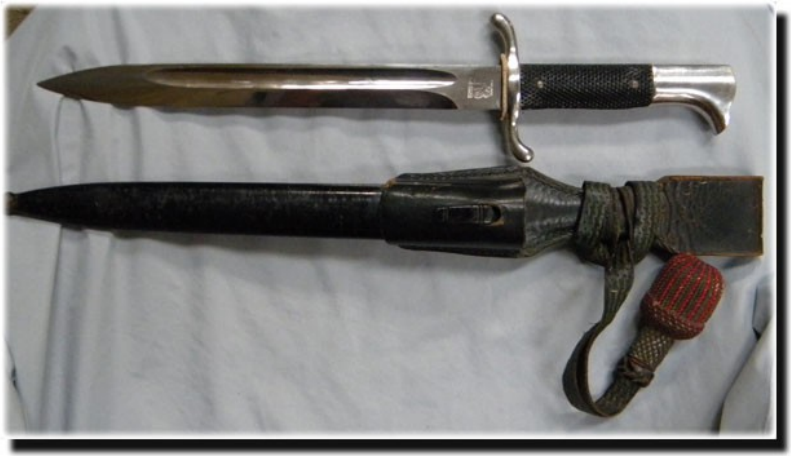
SHANNON brought in two knives that came from someone he knew. Shannon was told that during WWII the owners of the knives had a disagreement with the person who gave Shannon the knives. Shortly after the disagreement the former owners no longer needed the knives and so they were liberated from them.

The first was a Nazi youth knife, marked on the left side of the blade, RZM in a double circle with M7/13 below.



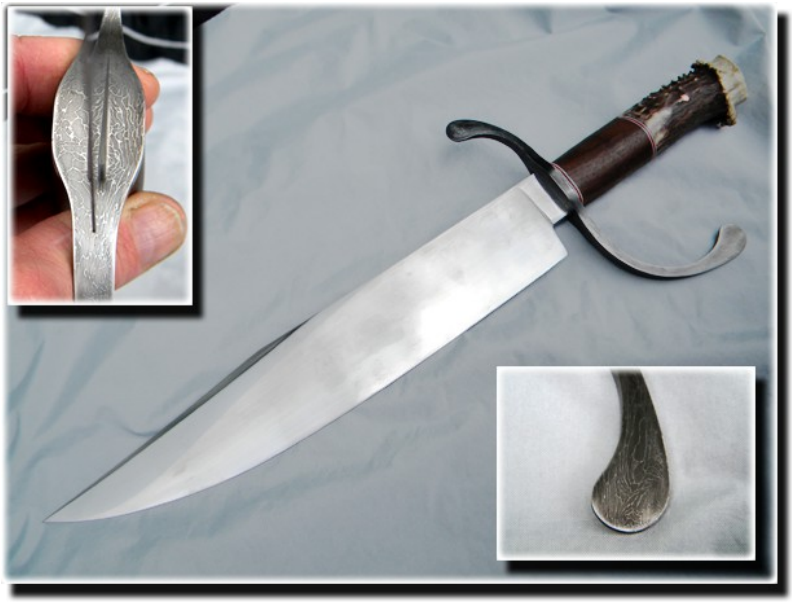
The second knife Shannon said was called a “Walk-up Bayonet”. The blade was similar to several bayonet blades I have, with a long slender blade thick in cross section. It had a spear point and an almost 1/2 width saber grind. A nearly full length fuller ran from the beginning of the curve to the tip back to the long ricasso. A smooth “S” guard separated the blade from the black “plastic” checkered handle which was finished with a long white metal semi birds head pommel. There were several comments about this knife not having any features that would allow it to be affixed to a rifle, which is the general defining function of a bayonet. The theory was thought to be

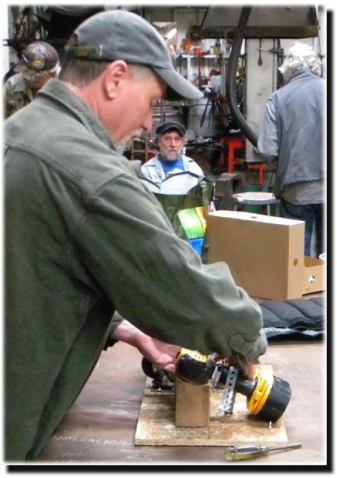
that a “Walk-Up Bayonet” was a tool used used for the same function as a rifle affixed bayonet, but used strictly when hand held. While walking up to an opponent at a closer range. This knife came with an interesting metal and leather black sheath with a metal spring on the front to engage the handle side of the guard as a retention device.



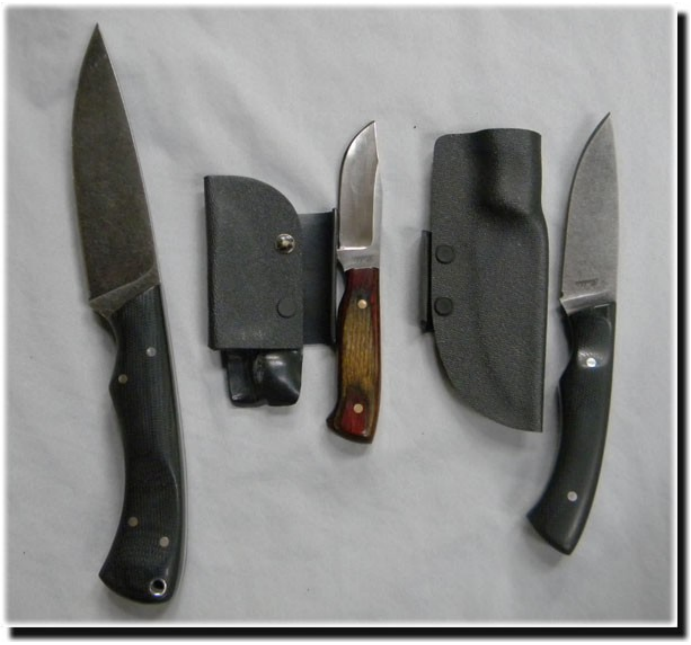
PAUL had some Speer and Jackson steel that tested 65Rc after quenching. He decided to try forge welding a piece of this steel in a San Mi style between some cable Damascus.

Your humble TEMPORARY scribe *(that would be **MIKE JOHNSTON**)* entered into the fray by prefacing that the piece I was presenting was not finished. The blade was 12” long, forged from a trailer leaf spring. I got a wild hair to make an “S” guard from cable Damascus, so I forged a billet with two folds. It welded nice and tight with no voids or inclusions and a tight pattern. The handle had red and white spacers separating the guard from the black walnut handle as well as the black walnut and the deer crown other rear half of the handle. The guard may have ended up a bit long, but it was just so fun to forge.

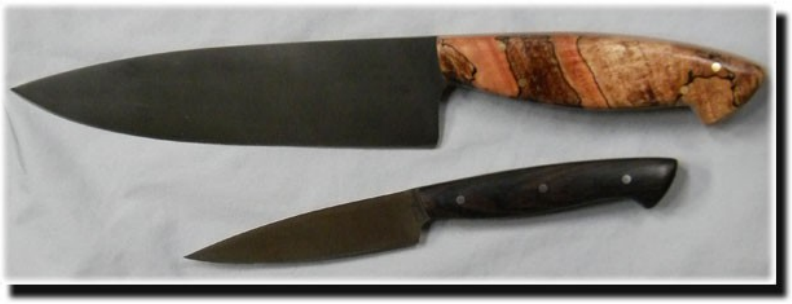


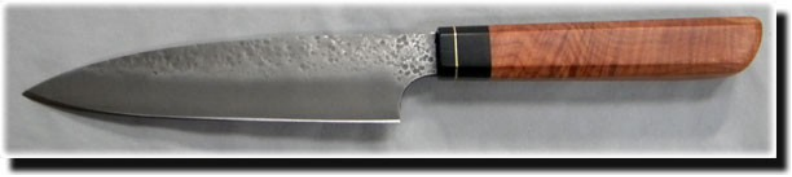


FRANK promised he would talk fast and be brief with his presentation. First he showed us two EDC’s with Kydex sheaths, one being 25 years old with a black Micarta handle. Frank said the smaller and newer knife had a more positive molded locking system for the knife which he likes better.



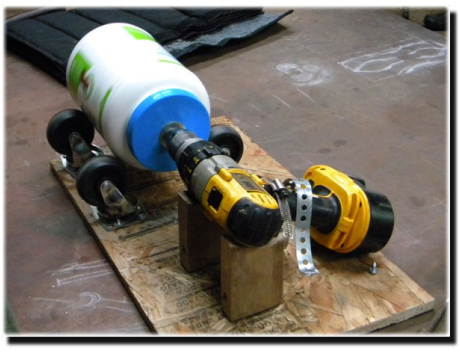
The kitchen knives that came next are what Frank said he has been focusing on lately. Different blade shapes, handle material and blade finishes have lead him to some discoveries. He found that for usability in the kitchen, a flat ground blade seems to work better than a hollow ground blade. His hollow grind is done on a curved platen that approximates a 30” diameter wheel. The hollow grind may be great for straight razors, but for kitchen knives he not so impressed.





Another idea was to develop a home made tool to give blades a stone washed finish.

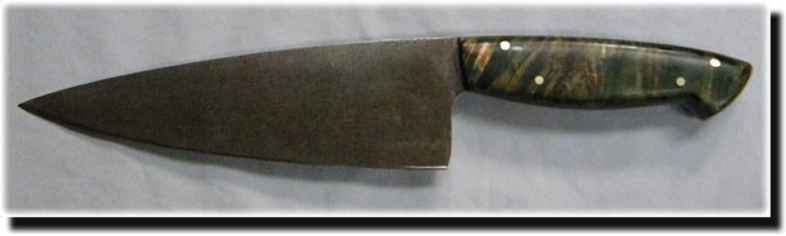
Four small cart wheels, two curved wooden brackets and some plumbers tape mounted on a piece of OSB for the base and VOILA! The drum was made of a protein powder container that was high density plastic with a bolt through the lid. The tumbling medium and blade are put into the drum and the lid screwed down. This bolt is chucked into a battery powered drill and laid into the base. Frank uses a hose clamp to regulate the trigger of the drill for a constant speed control.



Frank made a second drum for refinishing blades that already had handles attached. The bottom of the drum was cut to accept the blade and had metal brackets to hold the blade in place. Both these are made to tumble one blade at a time.

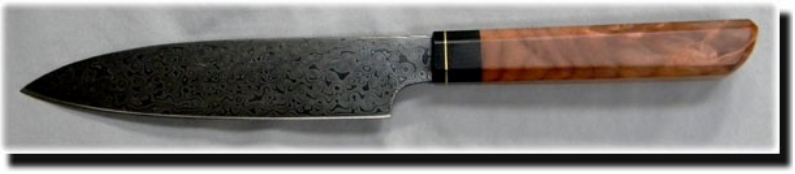
Frank had made another drum out of 6” PVC, but the threaded cap fitting was quite a bit more expensive. when He looked at making one out of 8” PVC, the threaded fitting and cap were outrageous.

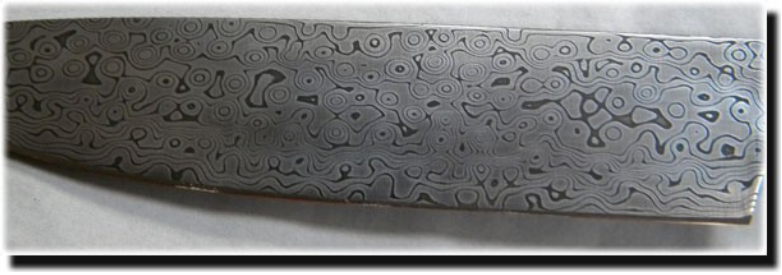
Harbor Freight Tool is Frank's source of ceramic triangle tumbling medium, but make sure it has silicon carbide in the ceramic. He found that tumbling for 10 minutes in a nearly full drum, turning the blade over and tumbling another 10 minutes gives him a nice even finish. Frank tried steel shot/ball bearings and they seemed to do nothing. He has tumbled the blades both wet and dry, as one of the group asked about using Windex or Simple Green in the mix. Frank said he got similar results both wet and dry.

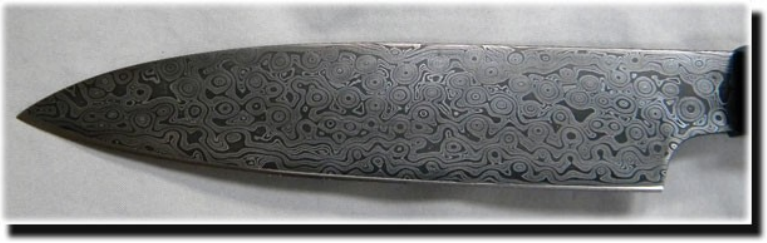


Frank talked about his raindrop pattern Damascus next. He starts with 1084/15N20 Damascus for his billet. After forging the blade blanks to a rough flat shape about .40” thick, he begins drilling. Frank uses a 3/16” drill bit, drilling about .005” deeper than the top of the “V” of the bit. Any deeper and the parallel sides of the hole could cause cold shuts in the surface of the blade. The holes are drilled as close together as possible in a random pattern on each side. For the 8” long blade knife, he started with a forged shape about 5 1/2” long with about 250 holes per side. AAHHH!!! He said this is the worst part of the process.

After this Frank forges the blanks to about .25” thick and grinds the blade from there. He would usually grind a blade thinner, but with the raindrop pattern, the thinner you get and closer to the edge, the pattern starts to disappear.



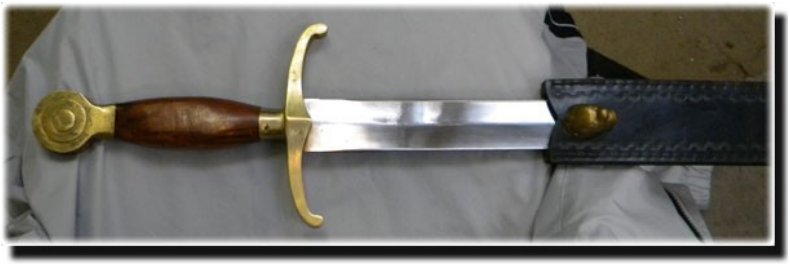


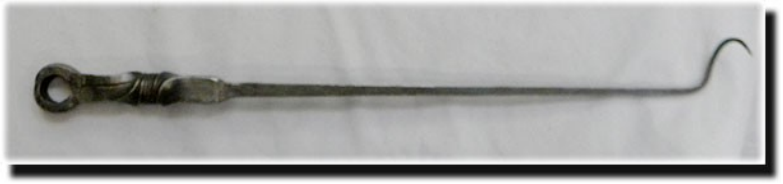


Thanks Frank for the great information.

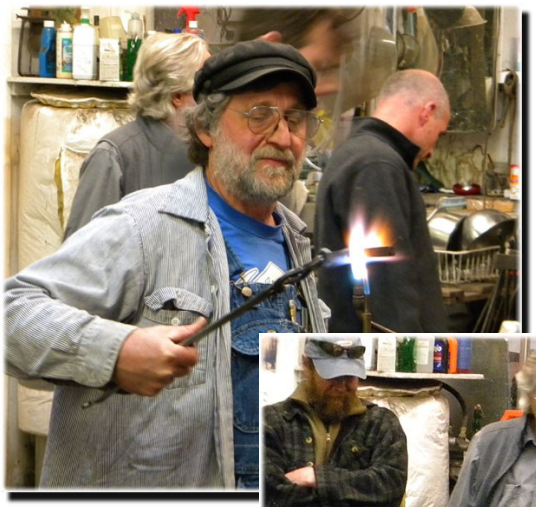
JOHN brought in a sword had had purchased from a knife maker in Roseburg. He had no idea of the origin of the sword and asked if anyone could help identify it. The thought was that it was recently made in one of the Asian countries that specialize in reproductions such as Pakistan.

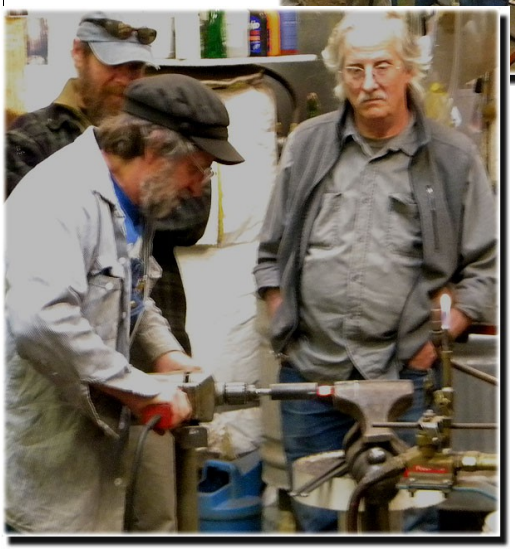
The sword had a double edged blade that had some heavy "after market" grind marks. The large cruciform guard and heavy disk pommel were brass. John said the brass piece on the scabbard had originally been part of a
brass door knocker.





Our host **DAVE THOMPSON** said he had a request to demonstrate how he makes his steak turners with the short tight twisted middle. The TRICK!! Start with a 1/2" square stock, it looked like about 4 1/2" long. Put one end in the vice and the other into the square end of a impact socket. Attach the socket to a BIG 1/2" drill. Heat a small section of the square stock with a torch and hit the drill trigger. A quick tight twist in the middle of what will be the handle of the steak turner. Dave then used one of his power hammers (lustful thoughts) to forge out the shank to a fine point then curled it with a hand hammer. I didn't catch the eye being forged in the end of the handle.





A very nice quick informative demo by Dave Thompson.

Many thanks to Mike Johnston for covering for me while I was down with the crud. See you Thursday!

Have fun and work safe!

Your Scribe ~ Michael Kemp

Website Links

5160 Club

5160 Club Newsletters are archived at:
http://www.elementalforge.com/5160Club/

Hint: to Google the archive for a specific knife style or presenter name, use a search like this:
sami site:http://www.elementalforge.com/5160Club
or this:
ron lake site:http://www.elementalforge.com/5160Club

Oregon Knife Collectors Association (OKCA)

The OKCA hosts monthly dinner meetings where you are guaranteed to see treasures from the wide world of "things that go cut!" OKCA also puts on a small show in December and the big knife show in April – if you haven't seen it you've been missing something special!

http://www.oregonknifeclub.org/index.html
Go to the "Knewslettter" link and scan a recent newsletter for a membership form and contact info.

Forums

Bladesmith's Forum aka Don Fogg Forum
http://www.bladesmithsforum.com/

Knifedogs Forum (USA Knifemaker)
http://knifedogs.com/forum.php

American Bladesmith Society
http://www.americanbladesmith.com/ipboard/

Usual Suspects Network
http://www.usualsuspect.net/forums/forum.php

Blade Forums
http://www.bladeforums.com/

Hype-Free Blades
http://www.hypefreeblades.com/forum

Peter Newman of Bent River Forge/Farrier Supplies has a closed Facebook group for Oregon Blacksmiths
https://www.facebook.com/groups/173156733117832

References

Wayne Goddard's books are available at Amazon:
http://www.amazon.com/Wayne-Goddard/e/B001JS9M10
And you can email the Goddards directly for his DVD at wgoddard44@comcast.net

Most of the companies in the "Knife Maker General" links (below) have a section for how-to books and DVDs.

Verhoeven's Metallurgy For Bladesmiths PDF – this is a very deep dive, not an introduction.
http://www.feine-klingen.de/PDFs/verhoeven.pdf

Verhoeven's updated book:
http://www.amazon.com/Steel-Metallurgy-Non-Metallurgist-J-Verhoeven/dp/0871708582

ZKnives – Knife steel composition/comparison/etc.
http://zknives.com/knives/steels

Kevin Cashen's Bladesmithing Info
http://www.cashenblades.com/info.html

Tempil Basic Guide to Ferrous Metallurgy
http://www.tempil.com/wp-content/plugins/download-monitor/download.php?id=Basic_Guide_to_Ferrous_2010.pdf

From the Heat Treating Society of the ASM – the Heat Treater's Guide Companion for Android devices. Look up heat treating details on hundreds of

steels in the palm of your hand.
https://play.google.com/store/apps/details?id=com.pfiks.mobile.heattreaters&hl=en

My own "Knife Info" has some of my knife musings and cheat sheet charts – plus Oregon and Eugene knife laws:
http://elementalforge.com/tips_notes/

Classes for Knife Making, Etc.

Gene Martin offers personal instruction at his shop south of Grants Pass for a daily rate.
http://www.customknife.com/

Michael and Gabriel Bell of Dragonfly Forge offer an ongoing series of small group classes in Japanese style sword forging and fittings. Located on the southern Oregon Coast.
http://dragonflyforge.com/

Murray Carter offers small group classes in a variety of subjects, primarily focused on traditional Japanese cutlery. Located in Hillsboro, Oregon.
http://www.cartercutlery.com/bladesmithing-courses/

David Lisch is an ABS Master Smith who has taught classes in Washington. He recently moved his shop and has not restarted classes yet – keep an eye out on this page:
http://www.davidlisch.com/Learn.html

Jim Hrisoulas now offers both formal classes and mentoring sessions in 2 hour blocks at his shop in Henderson, Nevada:
http://www.atar.com/joomla/ and click the "Bladesmithing Classes" link.

The ABS (American Bladesmith Society) offers classes in Washington, Arkansas and elsewhere – if you are up for traveling across the country to take classes, check out their "Schools" link:
http://www.americanbladesmith.com/

James Austin offers forging classes in Oakland, CA – axes, tongs, viking anvil, etc.:
http://forgedaxes.com/?page_id=148

Blacksmithing classes at Farrier Supplies aka Bent River Forge
26729 99W, Monroe, Oregon
Coal, coke, forges, parts, tools, classes...
https://www.facebook.com/FarrierSuppliesOR
(541) 847-5854

Blacksmithing and some bladesmithing workshops are hosted regularly by the Northwest Blacksmith Association: http://blacksmith.org/

USA Knifemaker has a lot of fun & informative videos on their YouTube channel:
https://www.youtube.com/user/USAKnifemaker/videos
… and hey - "free" is a hard price to beat!

Nick Wheeler also has a good YouTube channel with a lot of how-to videos:
https://www.youtube.com/user/NickWheeler33/videos

General Tools & Supplies

Woodcraft of Eugene – thanks to Joe & the crew for six years of hosting 5160 Club meetings – we've had to move on, but the hospitality was appreciated.
http://www.woodcraft.com/stores/store.aspx?id=515

MSC Direct
http://www.mscdirect.com/

McMaster-Carr
http://www.mcmaster.com

Grainger
http://www.grainger.com

Surplus Center
http://www.surpluscenter.com/

Victor Machinery Exchange
http://www.victornet.com/

Zoro
https://www.zoro.com/

Knife Maker General

Knife kits, steel, tools, machines, supplies such as handle material, fasteners, belts, glues, finishes, etc.

Jantz Supply – Davis, OK
http://www.knifemaking.com

Texas Knifemaker's Supply – Houston, TX
http://www.texasknife.com

USA Knife Maker's Supply – Mankato, MN
http://www.usaknifemaker.com/

Knife and Gun (K&G) – Lakeside, AZ
http://www.knifeandgun.com/

Alpha Knife Supply – ?Everett, WA?
http://www.alphaknifesupply.com/

True Grit – Ontario, CA
http://www.trugrit.com

Especially Abrasives – lower cost 2x72 belts
http://www.especiallyabrasives.com/

Knife Steel Sources

New Jersey Steel Baron
http://newjerseysteelbaron.com/

Kelly Cupples (High Temp Tools) – Alabama
http://www.hightemptools.com/steel.html

Niagara Specialty Metals – New York
http://www.nsm-ny.com (click Products/Knife Steels)

SB Specialty Metals – New York & Texas
http://shop.sbsm.com/

Bohler Uddeholm – numerous U.S. locations
ttp://www.bucorp.com/knives.htm

Sandvic – stainless steels – Texas & Pennsylvania
http://www.smt.sandvik.com/en/products/strip-steel/strip-products/knife-steel/sandvik-knife-steels/

Pacific Machinery & Tool Steel – Portland, Oregon
http://www.pmtsco.com/tool-die-steel.php

Alpha Knife Supply – ?Everett, WA?
http://www.alphaknifesupply.com/

Knifemaker Equipment

Beaumont (KMG) [Ohio] – the industry-benchmark 2x72 belt grinder
http://www.beaumontmetalworks.com/shop/

Travis Wuertz [Arizona] – premium versatile grinder
http://www.twuertz.com/Home_Page.php

Pheer [Gresham, Oregon] – affordable grinder made in Oregon
http://www.2x72beltgrinder.com

Oregon Blade Maker [Oregon] – affordable chassis and accessories, good reputation – you supply the motor http://stores.ebay.com/oregonblademaker

AMK [Ohio] – affordable grinder, quick-change between platen & contact wheel
http://amktactical.com/

Northridge Tool [Ohio] – precision manufactured belt grinders http://www.northridgetool.com/

Coote [Port Ludlow, Washington] – affordable, simple grinder – you supply the motor
http://www.cootebeltgrinder.com

Marinus Kuyl [Hillsboro, Oregon] – another affordable grinder made in Oregon – and parts – you provide the motor.
http://oregonblademaker.com

Grinder-In-A-Box – grinder kit, assembly required
http://www.polarbearforge.com/grinder_kit_order.html

The "No Weld Grinder" plans can be purchased from
http://usaknifemaker.com
either as a booklet or as a download – just use the search box to enter "no weld grinder"

Wayne Coe [Tennessee] – grinders, motors, VFDs...
http://www.waynecoeartistblacksmith.com

Contact Rubber Corp – wheels etc.
http://contactrubber.com/contact-wheels.asp

Sunray – drive wheels
http://www.sunray-inc.com/drive-wheels/

Renaissance Metal Art [Mulino, Oregon] – 80# ram air hammer
http://www.rmetalart.com/tools.htm

Anyang [Texas] – air hammers from 20# to 165#
http://www.anyangusa.net/

Meyer Machine Tool [Ohio] – treadle hammer
http://www.meyermachinetool.com/Blacksmith-div-.html

Spencer/Clontz tire hammer plans/workshops
http://www.alaforge.org/Trading_Post.html

Appalachian Power Hammer plans
http://www.appaltree.net/rusty/index.htm

Helve Hammer and Quick-Change Dies Video – from a BladesmithsForum.com thread.
https://www.youtube.com/watch?v=uzruqYkKGNM

True Grit – under "Machines & Accessories"
http://www.trugrit.com

Forge & Refractory

Chile Forge
San Marcos, Texas
http://www.chileforge.com/

Mankel Forge – Muskegon, Michigan
http://mankelforge.com/forges.html

Western Industrial Ceramics Inc.
All things refractory – Tualatin, Oregon
http://www.wicinc.com/

High Temp Tools (scroll down the page for the category buttons) Tuscaloosa, Alabama
http://www.hightemptools.com/supplies-mainpage.html

High Temp Inc. has also been recommended for Kaowool etc. Portland, Oregon
http://hightempinc.net/

Omega – thermocouples & measuring equipment
Stamford, Connecticut
http://www.omega.com/

Auber – more thermocouples and controllers, etc.
Alpharetta, Georgia
http://www.auberins.com

Hybridburners – home of the venturi T-Rex
Smithville, Georgia
http://www.hybridburners.com/

Pine Ridge Burners – for ribbon burners and all associated fittings, blowers, valves, etc.
Conway, Massachusetts
http://www.pineridgeburner.com

Zoeller Forge – low cost venturi & parts: Z Burners
Lanesville, Indiana
http://zoellerforge.com/

Here's the original article on making a ribbon burners that John Emmerling wrote back in 2005 for the NWBA Newsletter:
http://blacksmith.org/2005-1-hot-iron-news/
You can download the PDF from that site. John's article starts on page 11.

Blacksmith

Farrier Supplies aka Bent River Forge
26729 99W, Monroe, Oregon
Coal, coke, forges, parts, tools, classes...
https://www.facebook.com/FarrierSuppliesOR
(541) 847-5854

Blacksmith Depot
http://www.blacksmithsdepot.com

Pieh Tool
http://www.piehtoolco.com

Centaur Forge
http://www.centaurforge.com

Quick and Dirty Tool Co.
http://quickanddirtytools.com/

Logo/Etching/Stamps

Ernie Grospitch – Blue Lightening Stencil
http://www.erniesknives.com/

IMG International Marking Group
http://img-electromark.com/

Electro-Chem Etch
http://www.ecemmi.com/products.html

Steel Stamp, Inc.
www.steelstampsinc.com

Heat Treat Services

Here are some folks who provide heat treating services for blades. While all of these have been recommended by one reputable person or another I have not had experience with them. If you use one, let us know how it went!

Paul Bos Heat Treating at Buck Knives. Paul Bos has retired and handed the torch to Paul Farner. Highly reputable. Post Falls, Idaho:
http://www.buckknives.com/about-knives/heat-treating/

Peters Heat Treating is another highly reputable operation. Meadville, Pennsylvania:
http://www.petersheattreat.com/cutlery.html

Texas Knifemaker's Supply offers heat treat services. Houston, Texas:
http://www.texasknife.com/vcom/privacy.php#services

Tru-Grit provides heat treat services. Ontario, California: https://trugrit.com/index.php?main_page=index&cPath=34

K&G also provides heat treat services but I can't find a reference on their web site – you'll have to contact them for details. Lakeside, Arizona:
http://www.knifeandgun.com/default.asp

Byington Blades heat treat service is in Santa Clara, California: http://www.byingtonblades.com/

It's my understanding that Chris Reeve Knives uses ACE Co in Boise Idaho – which is enough for me to add them to the list:
http://www.aceco.com/heattreat/index.html

Wood Suppliers

Burl Source – handle blocks/scales – So. Oregon
http://www.burlsales.com/

Shelton Pacific – stabilized wood – Shelton, WA
http://stores.sheltonpacific.com/

Gilmer Wood – N.W. Portland
https://www.gilmerwood.com/

North Woods Figured Wood – Gaston, OR
http://www.nwfiguredwoods.com/

Wood Stabilizing

K&G (Knife and Gun) – Lakeside, AZ
Good reputation with everybody.
http://www.kandgstabilizing.com

Gallery Hardwoods – Eugene, OR
I've purchased stabilized blocks from them at the April show. They tend to be heavier, presumably more durable/stable but less wood-feel than others.
http://www.galleryhardwoods.com/stabilized.htm

WSSI (Wood Stabilizing Specialists International, Inc.) – Ionia, IA – some folks have had issues with them, some folks are totally happy.
http://www.stabilizedwood.com/

Alpha Knife Supply – ?Everett, WA?
http://www.alphaknifesupply.com/

Turn Tex Woodworks – San Marcos, TX
"Cactus Juice" and pressure chambers etc. for the do-it-yourself folks – your mileage may vary.
https://www.turntex.com

Other Goodies

Sally Martin Mosaic Pins – So. Oregon
http://customknife.com/index.php?cPath=13

Oregon Leather – 810 Conger Eugene and 110 N.W. 2ND Portland
http://www.oregonleatherco.com/

Coyote Steel – wide variety of new steel, scrap, copper, brass, bronze – Garfield & Cross St. Eugene
http://www.coyotesteel.com

Cherry City Metals – Salem, Oregon – metal recycling and useful objects
http://www.cherrycitymetals.com/

Amtek – tool steel & cutting tools
http://websales.amtektool.com

Rio Grande – jewelry tools/supplies
http://www.riogrande.com

Otto Frei – jewelry tools/supplies
http://www.ottofrei.com

M3 Composite – space age mokume & other
http://www.m3composite.com/

Voodoo Resins – striking resin handle material
http://www.voodooresins.com/

Minarik automation & control
http://www.minarik.com/

The Engineering Toolbox (formula & info reference)
http://www.engineeringtoolbox.com

Valley Stainless (that does water-jet cutting) is one of Craig Morgan's customers. They told Craig "bring in a pattern" and they'd work with you on small batch cutting. They don't have a website yet. 29884 E Enid Rd, Eugene, Oregon 97402 (541) 686-4600.