THE ONE AND ONLY MONTHLY NEWSLETTER OF THE

EUGENE 5160 CLUB – OCTOBER 2011

The October Meeting will be Thursday the 6th at 6pm at the Woodcraft store in Sheldon Plaza on Coburg Road, Eugene. Informal Steering Committee meets at McDonald's at the North end of Sheldon Plaza around 5pm.

Butch Vallotton shared insights and experience from his career in knife making and design.

MARK YOUR CALENDAR

Quality and grace.

Those are the words that come to mind when I look at folders made by **~ JESS HORN ~** who has agreed join us for the **OCTOBER 6TH** 5160 Club.

Wayne Goddard notes: "The younger folks probably don't know that most of the 80's, Ron Lake and Jess Horn were the two hottest names in folding knife circles. Both had to go to a lottery at shows so folks didn't get in fights... This is a rare opportunity to learn about the methods that put him at the top of the workmanship thing."

For a taste of Jess Horn's folders go to this site: http://www.sharpbycoop.com/jalbum/index.html then click the search icon at the left-bottom of the screen and search for "Horn". See you on the 6th to learn from a legend.

BUTCH VALLOTTON SPOKE AT THE SEPTEMBER 5160 CLUB MEETING

It was a pleasure to hear the stories, and an education to get the knowledge-from-experience shared at our September meeting by acclaimed knife designer and maker Butch Vallotton.

Way back when, Butch bought a decent looking Gerber. An "every day carry" meant to serve all those utilitarian purposes that an EDC blade is supposed to handle. But the blade got dull a lot sooner than seemed necessary... there had to be something better. With the attitude "if you want it done right you'd better do it yourself" he got some supplies – and his son got him some 440C – and that's how the blade building bug bit Butch.

So he started by making knives that were designed like a knife that he *wanted* to use – and that would stay sharp. That was back around 1980, and by '85 or

'86 he had started making lockback folders. He made quite a variety of pocket knives including out-the-front blades. His Italian style switchblades where such a hit that at one point he got two years behind on orders.

That prompted Wayne to muse about a customer who once offered Wayne $50 to “jump the queue” - the reply was “Sure, if you want to write letters to all the folks in front of you explaining why I should.” And he asked Butch how he handled pushy customers.

“Depends on how hungry I am!” Replied Butch – but he wouldn't let someone jump the queue. I gathered that some customers get pretty picky about how they want *their* knife built. And Butch noted that between the initial concept and the final execution a knife design can vary as you go.

Some jobs that he's been asked to do were just plain problematic. Butch shared his experience with the challenges of converting folders to autos – and sometimes it can create a temperamental result.

So Mr. Vallotton built up a reputation. Over the years he has worked with Spyderco, Gerber, Timberline, Microtech, Black Jack, Lone Wolf, and Al Mar... and probably others that didn't come to mind just then. Here's a Spyderco example:

Butch's collaboration on the Applegate-Fairbairn folder confirms his status in serious knifemaking circles.

Butch pointed out that to be approached for a collaborative project – or to design a knife for a commercial maker – you must be doing something unique. Plus luck. You just happened to be standing in the right place at the right time. Or you happened to say something that got someone's attention. Doing something unique – plain luck – and soldiering on. Wayne agreed – noting that his work with Spyderco and Diamond Blades had more to do with long term friendships and opportunities that come by over time than to any pushy self-marketing.

Vallotton confessed to being a gadget freak. And a sharpness freak.

In response to a question, Butch said that he is pretty attached to AutoCAD. After the initial learning curve he found the ability to define the parts of a folder and manipulate them in the computer to be invaluable. You can look through the layers and make sure you are not putting incompatible elements on top of each other. You can “fold” the blade and see how it will interact with the spring and catch and other knife parts – and adjust your design accordingly. All without having to build a series of prototypes.

Butch responded to a question about bead blasting, noting that he doesn't like the marks it leaves on shoulders – preferring a “stone wash” finish.

Vallotton does his own heat treating – with a caution that when you get the manufacturer's spec's for a steel you can adjust the soak time – stated soak times are usually for a 1” cube – so for a thin knife blade the listed soak times are longer than needed.

There was discussion of liquid nitrogen soaks and drawing and tempering techniques. Wayne said that in his testing, a 2 point reduction in Rockwell translates to about a 20% loss in edge holding ability.

The multiple temperings are necessary to convert retained austenite. Retained austenite is the weakest part of the blade.

The use of sharpening steels was described as being

inappropriate for a blade with over 60 Rockwell as the ridges on the steel can chip the edge. To which Wayne responded that he had actually ground the ridges off of sharpening steels to avoid that issue... using the steel to simply align the burr on the edge.

I noted down a recommendation for kitchen knives to be in the 56-57 Rockwell range.

Over-hardening – especially of air hardening steels (even of 5160) was discussed – with Wayne noting how he had once inadvertently tested a "Smithsonian Bowie" - when he threw the knife the tang broke *inside* the handle... which is obviously not where you want the steel to be hard and brittle. I believe this is the style of Bowie Wayne was referring to – where the handle seems undersized to begin with:

Editor's note: On the subject of unintentional hardening, I read a post by an accomplished maker who is convinced that when you drill into 5160 you can create a hardened area in front of your drill bit – if the drill bit overheats the steel and you pull the drill out the overheated area is cooled quickly enough by the surrounding steel to harden. That's his theory – and he has a plan to test it when he can get a "round tuit" – as the saying goes.

Butch passed around a very robust folder (pictured above) – with the diamond profile point which Butch called a "Bob Lum armor-piercing point." The catch/assisted opening release was unique... and impressive. This is no light duty knife!

Talk turned to how temperamental ivory and bone handle material can be – and the dangers of filling inside cavities with epoxy. If the knife is moved to a climate where the ivory shrinks, the epoxy will not shrink and the ivory will split. Words to the wise.

Responding to another question, Butch shared that he is fond of S30V, ATS34, D-2, and 154CM – and discussed Crucible/Niagara as a good source and mentioned Uddeholm as another good steel maker.

The evening was pretty informal and discussion turned to shop accidents. Buffing wheels figured prominently of course. Wayne shared a tip (so to speak) about using Super Glue to keep a severed finger-tip-pad in place while it healed back on. Super Glue, then some wrapping of toilet paper and an outer layer of tape.

There was a lot of bantering and speculation about a power hammer called the Metal Muncher that creates a ladder Damascus type pattern in plain steel – possibly due to the slight eccentric pull that the die makes on the steel with each hit. ~~I believe they were talking about Al Pendray having this hammer... but I could be mistaken.~~ Correction: I've been informed that the Metal Muncher being discussed is owned by Mr. Ford Swauger in Roseburg.

There certainly **was** discussion of how Al Pendray forges wootz at a dull red temperature – and some speculation about the metallurgy involved. Possibly the lower temperature forging keeps alloy banding from being dissipated – retaining the beautiful and functional pattern of true wootz.

And before we dispersed into the Summer evening there were other knives passed around.
The good:

And the bad-and-ugly... is this an early prototype for the "Rambo Knife"?

It was another good evening at 5160 Club – thanks again to Woodcraft for providing us with a great meeting space!

DE-CLASSIFIEDS

Buy/sell/trade/etc. notices received by the editor. I'll repeat notes a few times then drop them unless I hear that the deal is still on. Postings are not backed by anyone other than the person who sent in the notice. We're an honorable group of people but still, misunderstandings can occur and it's up to the folks making a deal to check it out first.

Larry "Bear" Criteser has a commercially made oxy/acetl. cart with an 80 or 100 cubic ft. oxy bottle (not sure which) with unknown amount of gas in it, for sale. No acetl. bottle, sorry. He'd like to get $75 for the cart and bottle. He also has an extra oxy bottle the same size as the one with the cart, with some gas in it for $40. Home phone is 541-689-5680, or email at <bearsgunnery@criteser.com>

Marty has a 6" jaw width post vise for sale. Also 1050 and 5160 steels, old files to make knives out of, and anhydrous borax. Martin Brandt 541 954-2168

Wayne's totally revised **Wonder of Knifemaking** is now available. And I believe he still has an active free steel pile beside his driveway, and an ongoing tool sale. Call for an appointment: 541 689-8098.

Mighty Mike has access to a steady supply of used LARGE brake drums that can be welded up as bases for post vices, grinders, propane forges or whatever. Let him know if you are interested: Mike Johnston 503 351-3104.

MISC. NOTES

Remember the Keith Johnson set us up with a public page in Facebook – which can serve as our meeting place in the virtual world: https://www.facebook.com/pages/5160-Club/193010470733488

As always – old newsletters can be found at: http://www.elementalforge.com/5160Club/

Keep Well! Your editor, Michael Kemp