July 2019

THE FORGE FIRE

The Newsletter of the Indiana Blacksmithing Association, Inc.

An Affiliate Of The Artists-Blacksmiths' Association of North America, Inc.

IBA is a Not For Profit Indiana Corporation recognized by the IRS under section 501(c)(3)

9:30 AM is the regular meeting time for IBA Hammer-Ins
with beginner training available at 9:00 AM.
PLEASE MAKE SURE TO ASK FOR HELP!

If you would like an IBA membership application form, please contact Farrel Wells, Membership Secretary (765) 768-6235.

BULK LOTS ARE AVAILABLE TO DEMONSTRATORS,
SHOPS, SHOWS AND OTHERS WILLING TO MAKE THEM AVAILABLE.
WE APPRECIATE YOUR HELP.

More nearby resources and organizations for blacksmiths:

Rural Smiths of Mid-America:
Meetings are on the first Saturday of each month
Call Ron Gill
317-374-8323 for details

IBA MEETING SCHEDULE

Check the latest *Forge Fire* for monthly **IBA** revisions.

No Hammer In scheduled at this time

Editors Message

FROM THE PRESIDENT

I am writing this in the last week of June. We had an excellent conference. We tried a new iron-in-the-hat that worked well at least financially. Mark Asprey had an excellent pre-conference workshop and did a great job as our conference demonstrator. We had 83 pre-registrations and about the same number walk in registrations. We had 160 to 170 people at the conference. I am sorry If you weren't there, You missed a great time. Start planning to attend the 2020 Conference. We, the board, are starting to plan next year's conference.

Here is a financial breakdown of the conference earnings:

Iron in the hat	2,048.00
Registration	9,855.00
Auction	6,070.50
Classes	1,500.00
Total income	19,473.50
Total expenses	9,303.75 (pending any unknown expenses)
Net Profit	10,167.75

Now everybody say wow!!!!!!!!!!!!!

I want to thank everyone who made this conference a success.

Gary Phillips, President IBA

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Dates to Remember

August 2-18
Indiana State Fair

August 24 Sale
Janet Lorance
(see back page for details)

October 11-12
UMRBC
(Pontiac)

Indiana State Fair

The Indiana State Fair runs August 2– 18. If you are interested in helping in the blacksmith shop, contact Bill Newman at: ruralsmiths1@yahoo.com

IBA website: www.indianablacksmithing.org IBA Facebook page: www.facebook.com/groups/IndianaBlacksmithingAssociation/

IBA Satellite Groups and News

1) Sutton-Terock Memorial Blacksmith Shop
Meet: 2nd Saturday at 9 AM
Contacts: Fred Oden (574) 223-3508
Dennis Todd (574) 542-4886

2) Jennings County Historical Society Blacksmith Shop
Meet: 2nd Saturday at 9 AM
Contact: Ray Sease (812) 522-7722

3) Wabash Valley Blacksmith Shop
Meet: 2nd Saturday at 9 AM
Contacts: Doug Moreland (217) 284-3457
Max Hoopengarner (812) 249-8303

4) Fall Creek Blacksmith Shop
Meet: 4th Saturday at 9 AM
Contacts: Gary Phillips (260) 251-4670

5) Maumee Valley Blacksmiths
Meet: 2nd Saturday
Contacts: Clint Casey (260) 627-6270
Mark Thomas (260) 758 2332

6) St. Joe Valley Forgers
Meet: 4th Saturday at 9 AM
Contacts: Bill Conyers (574) 277-8729
John Latowski (574) 344-1730

7) Rocky Forge Blacksmith Guild
Meet: 2nd Saturday at 9 AM
Contacts: Ted Stout (765) 572-2467

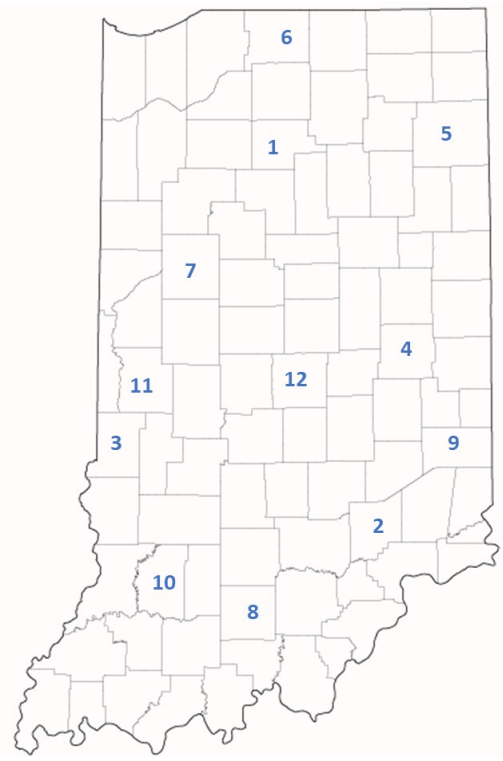
8) Meteorite Mashers
Meet:
Contacts: Mike Mills (812) 633-4273
Steve King (812) 797-0059
Jeff Reinhardt 812-949-7163

9) Whitewater Valley Blacksmiths
Meet: 2nd Saturday
Contact: Keith Hicks (765) 914-6584

10) Bunkum Valley Metalsmiths
Meet: 1st Saturday
Contacts: Jim Malone (812) 725-3311
Terry Byers (812) 275-7150
Carol Baker (317) 809-0314

11) Covered Bridge Blacksmith Guild
Meet: 1st Saturday
Contact: John Bennett (812) 877-7274

12) Satellite 13
Meet: 4th Saturday
Contact: Darrin Burch (317) 607-3170
Doug Wilson (317) 439-7684



Jennings County Historical Society Blacksmith Shop

The Jennings County Historical Society Blacksmiths met on June 8 with Dave Good making a cutoff tool from a bearing. Drew Davis worked with Bill Kendrick to make a bell hanger . Bill Kendrick got a chance to work with the big hammer with a piece of 4140. He also won the coveted door prize. A beginner, George Good, assisted by his father, Dave, managed to make his first "S" hook. Dave finished out the day by making a genko leaf. The next meeting will be at Vernon on July 13. We hope to see you then. Paul Bray

Meteorite Mashers

This month we met at Dave Kunkler's shop in Branchville. We were pleased to welcome Brad Weaver and Charlie Helton to join our meeting. Brad spoke about the nomination process for blacksmith of the year and rookie of the year as well as the Paul Moffet service award. We had an iron in the hat that had more items then tickets were purchased so a winner take all last ticket draw cleared the table. Brad presented a nice pair of POZ tongs as a door prize. Dave and Donna Kunkler had made a pot of pulled pork and Mike Mills brought fried chicken and there was much good food. End of the day saw us a little smarter, no better looking and sweaty, but we sure had a darn good time. Next meeting will be at Jason Bowman's shop in Elizabeth.

Cool Tools for your Vice

By Mark Teece

Holding round stock or pipe in a vise.

Helpful for working on pipep or round hand tools. Two pieces of angle iron welded to a third piece that rests on the jaws. The short piece of round stock stops the tool falling off the vise when you remove your work piece.

Holding short pieces of bar stock.

To stop the jaws from “rucking” and being able to hold onto short pieces of stock, a set of spacers are really helpful.

This great and simple tool was made from 1/8” thick pieces of plate by Bryan Moran from the Mohawk region.

Holding a workpiece that has a taper.

The tool is made from a large piece of angle iron (1/8” or thicker), as wide as your vise. Then weld a piece of 1/2” round bar (or thicker) to the middle of the angle. The iron swivels on this round bar and automatically adjusts to the taper.

Vise tool for working on animal heads.

Made from two pieces of angle iron welded at 90o to each other. A short piece of steel welded at the end of the vise piece stops the tool sliding off the vise.

This article is reprinted courtesy of the New York State Designer Blacksmiths “Anvils Chorus” newsletter Spring 2019.

The Pencil vs The Hammer

By Russ Jennings

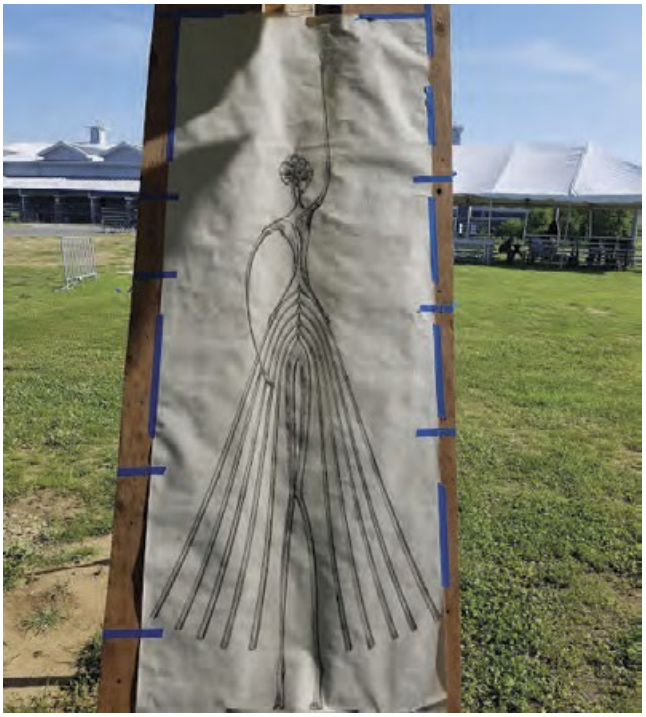
This article is reprinted courtesy of the New England Blacksmiths newsletter Spring 2019.

At the 2018 ABANA Conference, I had the opportunity to meet lots of talented smiths, and see numerous examples of beautiful artwork. From the gallery, where I could see and touch amazing sculptures, to slideshows of incredible ironwork hosted by their creators. Best of all, were the blacksmiths at work, creating art right before my eyes.

This was my first exposure to blacksmithing and metalwork as "art." I had only seen functional things made well, like gates or furniture. It had only vaguely occurred to me that you could make something meant to hang on a wall and view as you would a painting. Iron Art was on display at all scales, ranging from small items that one might hang in a living room, to large public installations.

I was driven to ask myself; why does this work look better than my own? What skills do I need to refine, what concepts should I master, what aspects of blacksmithing do I need to improve upon to become an artist? I've been very lucky so far; I've attended some excellent classes as well as worked alongside some talented artists. I have a good understanding of the basics; I can taper, scroll, and bend, I can use tools and jigs. So why doesn't my art look like the stuff that's on display?

One of the demonstrators was Pavel, a European smith who makes dynamic sculptures. He was forging a ballerina in a dress. The dress was made of multiple pieces of steel, forge welded in the center, and then curved gracefully into an arc with a point in the center. These arcs stacked atop one another in such a way that they could spin, yet remain balanced and standing. The sculpture would move and sway just like a real dancer.



While watching Pavel work I realized he wasn't doing anything that I couldn't do myself. The most complicated part of the project was the simple fagot weld in the center of the bars. No individual piece was complicated or unusually shaped. He did the basics well. After every heat, he would compare the piece he was working on to a full sized drawing he had nearby. By alternating between forging and comparing the piece in his hand to the full size drawing, nothing was left to chance. Each piece was planned, already sized and laid out.

Another talented presenter was Mark Aspery, someone I have met a few times before. I asked him a question, "If things like tapers, bending, hooks, and scrolls are all 'The Basics,' then what is advanced? What skills are "Blacksmithing 102?"After a long conversation, we agreed that there aren't any "advanced" forging techniques. Maybe traditional joinery counts, but even that has less to do with how well you forge, and more to do with how well you measure.

Don't get me wrong, I understand there is difficulty in creating masterful art. After all, getting the spacing correct on balusters is plenty difficult, as is ensuring that a myriad of different pieces all match.

What I learned from the conference is that you reach a point where your skill with a pencil matters as much as your skill at the forge. A pleasing design is the most important part of a project. Once you have a good drawing, you can get to the forge and produce results right away.

With that in mind, I did some brainstorming with a sketchbook and designed an artistic sculpture piece. I've always liked sea monsters, and I wanted to create something that looks weightless and sinister, floating weightlessly. It only took a few rough sketches for me to nail down exactly what I had in mind. I broke it down into smaller, simpler shapes, and then set to making it.

The frame was simple, just an upset at each end and an upset corner. The curved shapes are simple straight tapers bent around a circle jig. The hardest part was tapering the pipe, that was done with a three sided jig in a power hammer. The small tentacles were tapered, then bent using a torch after everything else was assembled. The individual pieces aren't complicated when viewed on their own. In the unassembled photo you can see them. Once assembled, they produce an artistic whole greater than the sum of its parts. Building these pieces was relatively quick and straightforward. I have a bad habit of going into the forge with a rough idea of what I want to make and then getting stuck in the details. This time I had a list of easy to make components, and it was just a matter of forging them out. Starting work on an abstract idea is much harder to finish than a planned design.

In my quest to become an artisan blacksmith, I've learned that my blacksmithing can only go as far as my artistic abilities. The advanced parts of smithing have nothing to do with the hammer but with the pencil. Studying traditional art, from Ancient Egypt to art deco, has put me on the right path to becoming a better artist.

Fly Press & Tooling

Peter Clark, Summerville, Oregon

Several years ago, I attended what was for me a pivotal class taught by Daniel Miller. The class was on joinery and the use of the fly press as an accurate means of forging metal. Daniel is an amazing individual, artist, instructor and friend. After that class, I immediately bought a fly press, a #4 Sweeny and Blocksidge. A few years ago, I decided I really wanted to better incorporate the fly press into my forge work. It wasn't that I started designing work to be made on the press; it was more like, How can I utilize this amazingly simple, quiet and powerful tool to help forge the projects I'm making? I now have two fly presses, with plans to get a third – the Sweeny and Blocksidge, mentioned above, and a Norton #6/12. The Norton has a bigger than standard space between the bottom plate and the screw that holds the top tools. I have this one set up for drifting holes. The third one will be a deep throat and a bit more powerful to round out my presses. I use my fl y presses for fullering, bending, straightening, forming, drifting and stamping. Here, I would like to share what I have learned in the six years I have been forging with a fly press.

Some back story. After taking Daniel's class, I helped organize a hands-on workshop for CBA members with Daniel instructing. In preparation for the workshop, I, along with several other smiths, needed to make a bunch of tooling in the style of Daniel's work and to his specifications. These tools included butchers, fullers, drifts, strippers and bolsters. This set of tools is the foundation for the rest of the tools I have made for my use. The functionality, precision and accuracy a fly press offers are only limited by one's imagination and skill. At this point I use the fly press on virtually every project I do, whether it's a one-of-a-kind sculptural piece or a batch of handles for my skillets. I have made a variety of drifts in many shapes and sizes, a very simple adjustable stripper to use with these drifts and a more complex spring bolster with stripper included. I have made hot and cold forming tools as well as set tools.

However, I offer a word of caution with the tools I'm going to be sharing. When we set out to make the tools required for Daniel's workshop, we made some of them just like his. Direct copies, in fact. This was a mistake. Daniel even warned me! See, some of his tooling was made for a specific task on a specific project. Or – and this was more the case – he had adapted old tools for new jobs. We copied this history, and it had no relevance to us other than the experience we gained by making them. We used many of the tools for the workshop, and I still use some to this day. Some have been replaced with tools that are more relevant to the work I do. I offer all the tools I use as a guide to what can be done with the hope that it will help you further what your flypress can do for you.

When designing and making flypress – or any tool really – consider its intended use as well as its possible future uses. Here are some things to consider for press tools. Make sure the shaft is long enough for the handle to clear a work piece while the handle is swinging over it. You also don't want it so long that it makes it hard to work thicker stock. When making a bunch of top and bottom fullers, set tools and texture stamps, it is a good idea to use the same size tool length so that you don't have to change the stop collar all the time, and in some cases, it can alleviate the need to reposition the handle.

Fly Press

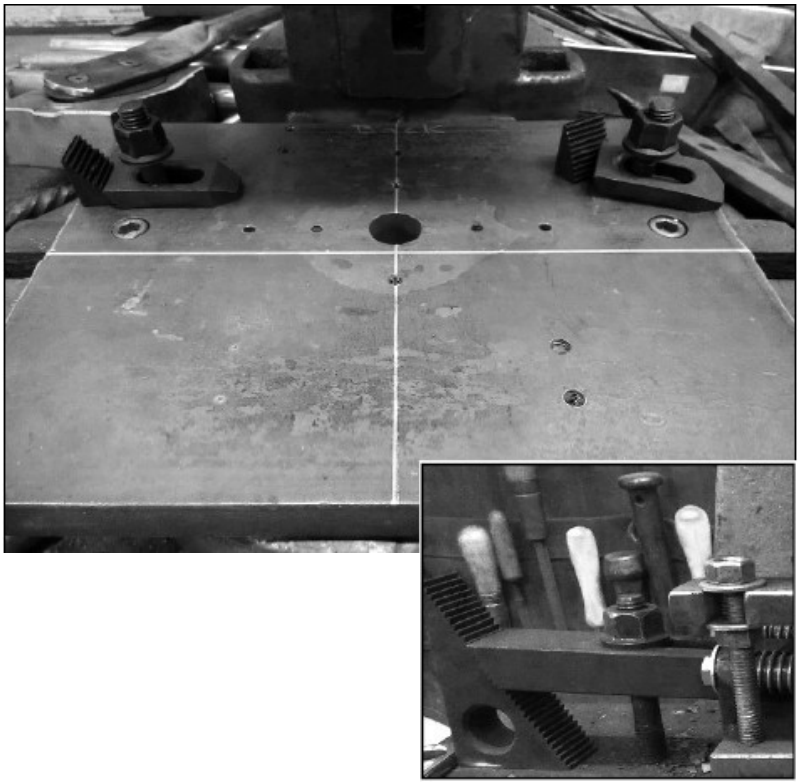
Setting up a Fly Press

If you didn't get the factory table, let's start with the table on which the press is to be mounted. Of the two presses I use, one has a small table about the same size of the press. The other has a larger table with about 12" extra on either side of the press. I prefer the smaller table, although I use the larger table for storingtools and parts from past projects, until they fall on the floor! Something to keep in mind: Whatever you keep on a fly press table will eventually wind up on the floor unless it is bolted to the table! You will also want to bolt the table to the floor or attach it to a sturdy object such as a post or wall. My table heights are around 40". I think higher is better. The weight on the top of your handle will clear your head while working, and it is nice not to have to bend over to see what you're doing.

Mounting Plate for Bottom Tools

I have found that using a piece of 1" thick hot-rolled plate works the best as a mounting surface for the bottom half of tooling. One of my presses has a 3/4" plate. I find that to be too thin. I like the adjustability allowed by the deeper threads into the plate. I find 1/2" thread penetration into the plate to be a minimum. My plates have 3/8-16 and 1/4-20 threaded holes for bolting tooling down.

Example of my layout. I have found those lines to be very helpful when positioning tools.



I have tried bolting tools directly to the base. This method has limited adjustability, and it is more time consuming to fabricate them and change them out.

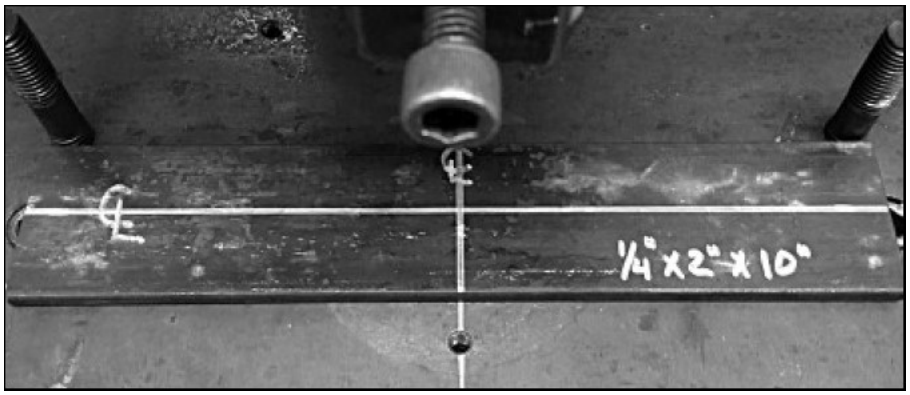
Of the variety of ways that I have tried to affix tooling to the plate, the most secure and adjustable way I have found is by using machinery hold-downs.

Fly Press

I have a set of machinery hold-downs screwed to the wall behind both of my presses so I always have the holddowns I need close at hand. In laying out the mounting plate, bore a 1" hole at what will be the center of the plate when mounted on the press. Use T nuts or large hex nuts to mount the plate to the T slots in the press base.

I used hex bolts countersunk in the top. You could use machine screws as well. The goal is a very secure, yet easy-to-adjust mounting system. For the machinery hold-downs, I drilled and tapped two holes, equally spaced behind the center point of the plate. A mistake I made was not getting a piece of 1" that covered the whole base. I have drawn X and Y lines on my base plate to aid in setup. The X line was drawn off set towards the front of the plate by 1" so that I can see it easily while setting up bottom tools. The Y line is centered on the 1" hole in the plate. I use a 1" shaft secured into the tool holder to locate the bottom plate on center and adjust to square it up.

Here is something I have found very helpful when laying out the machinery hold-down holes. Lay out and drill them
on center 1" back from the 1" hole in the base plate and wide enough to use a 1/4" long mounting plate for the bottom tools. I have started using 1/4" x 2" x 10" strapping as my bottom tool plate. I lay out everything square to my center lines.



Top Tool Mounting

With regard to tools mounted into the top, some of them bottom out in the mounting hole (for hot work). For those, I grind on a large bevel. Otherwise they get a collar for cold work. It's faster and easier to bevel them than to make a collar.

Most of the presses I have seen and used have either a 1" hole for tool holding or the slightly smaller metric equivalent of 25mm in the top tool holder. I have bored mine to 1" so that I can interchange tools with my

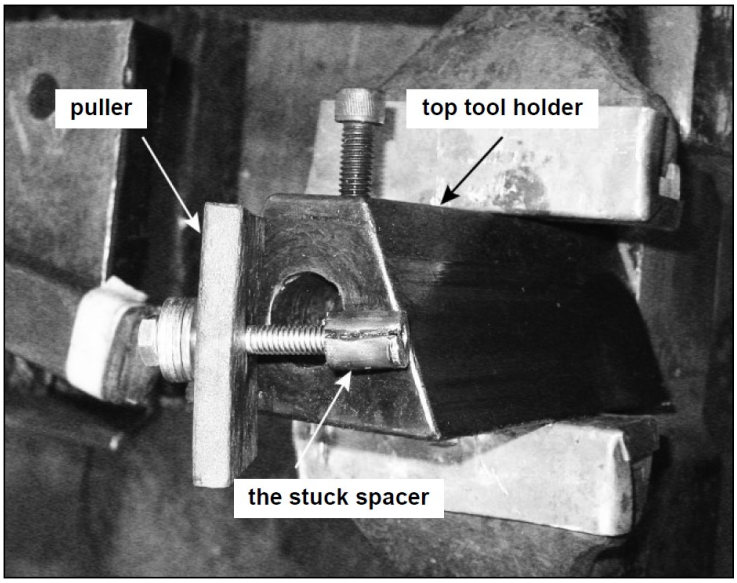
Fly Press

Tool Tips

1" Bolts. If you come across 1" diameter bolts, grab them! They are usually of good quality steel and make excellent shafting for tools, and the hex head can be forged into texture buttons and domes.

Spacers. I have a variety of spacers that I use to set the depth stop for desired thickness.

Stuck Tools. Removing a stuck tool from the top tool holder. Once, I needed a spacer for a tool and grabbed a small piece of round from the scrap bin. It turned out that the scrap piece was the perfect size to wedge firmly into the top tool holder (oops). I ended up drilling and tapping a hole in the stuck spacer to make a simple puller to extract it.



Peter Clark is a long-time CBA stalwart, now living in Oregon. He is the founder of Northwest Skillet Company, manufacturing heirloom quality cookware using steel and copper (Northwest Skillet company.com). Homestead Springs Farm is also the home of Turkish Boz Shepherd livestock guardian dogs and Kunekune pigs (www.turkishbozshepherds.com). Visit Sue's page www.facebook.com/kunepigs.

This 4 page article reprinted from the July/ August 2019 edition of the California Blacksmith a newsletter of the California Blacksmith Association.

The Upper Midwest Regional Blacksmith Conference (UMRBC) will be held at Thresherman's Park in Pontiac, IL on October 11&12.

Registration form and details can be found at: http://umba.name/regional-blacksmith-conference/

The *FORGE FIRE*
Newsletter of the
Indiana Blacksmithing Association, Inc.

Farrel Wells *Membership Secretary*
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August 24 Sale

Janet Lorance is having a tag sale on some of Rogers surplus equipment. Items will be marked and you can take home what ever you want. Roger had a tremendous amount of surplus equipment stored at his home it should be quite a day.

Janet's address is: 6091 North 3850 East
Bellflower Illinois 61724.
Ph: 309 475 9012.