Woodchips Woodworking Club
Foreman Requalification Training

January 2010

1. The shop foreman is a supervisor and the final authority on all activities in the shop. Act as necessary to ensure shop safety. A foreman, whether the designated foreman for that shift or in the shop working on a project, always has the responsibility and authority to intercede as necessary to ensure shop safety. Refer to the Woodchips Shop Manual, Operational Procedures, for complete information on foreman and shop responsibilities.

2. The primary duty of all foremen is to manage a safe operating environment in the shop. Individual safety is the top priority, followed by machine and equipment safety. The foreman will not work on any personal or shop project while on duty unless there are no non-foreman working in the shop. When in the shop, a foreman always has the responsibility and authority to intercede as necessary to ensure shop safety, even when they are not officially designated the "Qualified Shop Foreman." Do not allow the assisting of members to interfere with your primary duty of supervising those working in the shop, especially non-foremen. Examples:

- Know and follow all recommended safety rules as outlined in the SCA Woodchips Shop Manual. Read the Operational Procedures and all Safety sections, as well as Foreman and Monitor duties. Foremen should also be familiar with the general safety items in each cluster. Cluster training is mostly safety training, whereas, specific tips and techniques on the use of the machine are advanced training. The member should ask for specific training on any machine he/she wants to gain more proficiency on.
- Know and understand each machine's capabilities.
- Safety glasses must be worn when operating power tools and machines.
- Jackets, loose jewelry and gloves should not be worn, and the fabric from sleeves and sweatshirts should be above the elbows.

3. The foreman should maintain good situational awareness to ensure each member's methods are properly set up and executed. If there is any doubt, the foreman will stop the operation. If time permits, the foreman can offer suggestions, however, if a member requires assistance that will detract from the foreman's primary shop safety responsibilities, the foreman should ask the member to request assistance from another member in the shop or seek specific training from an instructor or mentor. Keep in mind, there is usually more than one way to accomplish the same task.

4. Ensure all tools and equipment are operated in accordance with all manufactures recommendations to promote safety and so as not to cause excessive wear or abuse that could lead to tool damage. Being in a hurry is the primary cause of many accidents and machine/tool abuse.

5. Conditions permitting assist in some advanced operations, such as:
    - Setting up the dado blades and changing the SawStop cartridge.
    - Changing and setting the band saw blades.

- Changing sander belts and discs on the small table sanders and the 43" sander.
- Using available jigs.

6. Specific Instruction for Foremen Refresher:

- The instructor will discuss:
    - The operation of the sawdust collection and high/low-pressure air systems found in the woodshop.
    - Location and use of the Emergency Power Shut-Off Switches.
    - The requirement that the following tools/machines require foreman supervision to operate: installation of the spindle on the Shaper, and the removal of the motor unit and the changing of the cutting bit on the Domino Joiner.

- Table Saw, Planer, Jointer and the Compound Miter Saw. Each foreman will discuss/ observe/practice proper dado blade and cartridge changes, set-up and adjustment techniques for the table and miter saw, planer and jointer as well as fence adjustment and wood feed techniques. Discuss the use of the sled and stop blocks.

- Shaper, Band Saw and Drill Press. Discuss/observe/practice proper shaper spindle installation and the proper tensions for the band saws. Accomplish a review of the various drill bits, including plug cutting, brad point, forstner, spade and countersink bits, along with their associated uses, drilling techniques and applicable drill speeds.

7. The following may be reviewed during Forman requalification training and are examples of operations a foreman should be sensitive to while observing a member operating a power machine. Understand that cluster training is required before any member is allowed to use any tool in that cluster. Cluster numbers are listed on the bulletin board behind the monitor, and in the Shop Manual, available on-line.

THE TABLE SAW
- Position yourself to observe the member if you are unfamiliar with their skill level.
- In most cases the longest side is always placed against the fence.
- The blade angle should be checked to ensure cut accuracy.
- The use of feather boards is recommended to keep hands away from the blade.
- Offer assistance when cutting large stock.

THE JOINTER
- Check the fence setup angle. The fence is the surface that squares the edge to the surface of the board, therefore the stock should be held firmly against the fence.
- The minimum stock length is 12" because the jointer wants to kick the front end down and back end up on short wood (under 12") therefore the operator does not have the mechanical advantage to hold it down. (leverage)
- Understand the dangers of jointing a thin piece of wood without push sticks.
- The availability and use of push sticks is important to keep hands from passing near the spiral cutters.

- Surface jointing is an advanced procedure. Suggest using the planer if possible.

THE PLANER
- Ensure the member sets up each cut correctly and does not attempt to remove excessive material on subsequent passes.
- Consider the use of a "sled" for short pieces.

THE ROUTER TABLE
- Discuss proper setup of the cutting heads and fence.
- The use of feather boards and push sticks is recommended to keep hands away from the cutter head.
- Do not adjust the cutterhead while the machine is running.
- When using the hand router, ensure proper board support, depth of cut and support (non-rocking) of router is established.

THE BAND SAW
- Focus on hand position and finger placement. Fingers should be held firmly on the edges of the wood and, whenever possible, outside the "Danger Zone."
- Emphasize the use of a push-stick whenever possible.

THE DRILL PRESS
- The bigger the drill bit (Spade bit, hole saw), the more torque or force it will transmit to the work piece, making it more difficult to control.
- Determine when the work should be clamped to a jig or the table rather than hand held.
- Check that the drill, when lowered fully, won't contact the table.

DOMINO JOINTER
- Domino Joiner may be used as a substitute for cutting mortise and tenon joints.
- Brief overview of the switches and operation.

SHAPER
- Discuss key features, switches and operation.
- Discuss/demonstrate/practice spindle installation.
- Be sure to unlock the spindle before closing the door and starting the machine.
- POWERFEEDER
    - Briefly discuss the switches, adjustments, use and operation.

THE WIDE BELT SANDER
- Check the paper grit size for the job requirement.
- Check setup for first cut to ensure the cut would not be too aggressive.
- Review use of the digital gauge/hand wheel for additional cuts.
- Be sure to stay within the machines operational parameters, which is 50% or less than maximum load.
- Fully shut down the machine after use, and turn off the digital set gauge.

- If a finer grit paper was used during the operation, it must be replaced by the standard grit paper when the job is complete.

THE MITER SAW & COMPOUND MITER SAW

- Review the switches and levers on the miter saw.
- When crosscutting a short a piece of wood, the same problem of having the wood kick into the blade because of little or no mechanical advantage can happen as on the jointer. Keep hands 8" to 12" away based on manufactures recommendations.
- On the Sliding Compound Miter saw the cut should be made pushing toward the fence [always work against the cut].

THE VERTICAL BELT SANDER

- Ensure the operator positions the work flat on the table of the machine while sanding.
- The operator should never lift the work off the table of the machine as in rounding a corner.
- Watch for good hand position to keep hands clear of the sanding belt.

THE BRAD NAILER

- Be aware that nails can "blow-out" of the side of the board where the user may have their hands while trying to secure their work. Keep fingers away from that area.

FESTOOL SAW

- Discuss the use of the saw and setting up the rails prior to a cut.
- Ensure proper board support and cutting depth to avoid penetration of the cutting table.

WOOD LATHE

- Ensure proper safety equipment is worn. Face safety shields are required.

PANEL SAW and ROUTER

- Discuss the set up and operation of the panel saw and router.