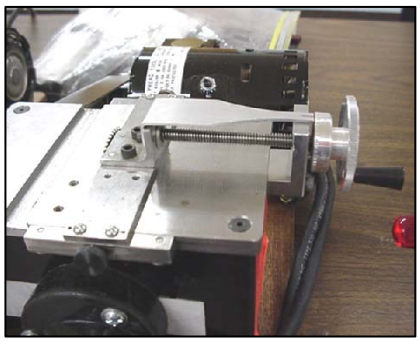
Miniature Table Saws

The January meeting was Miniature Saw Expo night, as several different units were put on display. Sid Wotman started things off by describing some of the various accessories he had purchased for his stock Preac. It was pretty much a case of "the Good, the Bad, and the I don't know how this damn thing really works."

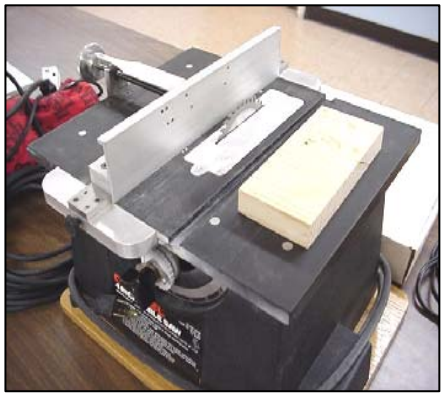
Extensive discussion focused around the Preac Auxiliary Tilting Table. Sid stated that this fixture was invaluable for making some of the parts on his *Morgan*. However, it is not a user-friendly tool. Ripping small parts can be very difficult and dangerous. Alignment of the plate rip fence can be hit or miss, and stock has a tendency to want to "fall" towards the blade, which causes irregular cuts. Ray Oswald offered an excellent tip concerning the latter problem. Once you have the auxiliary table set to the correct angle, elevate one side of the table saw base; so the fixture is now on a level plane. This will help control the piece as it is fed through the saw.

Sid also showed us examples of Preac's Sliding Table and Taper Attachment, which were decent products. The one item, which Wotman felt was a waste of money, was the height adjustment device. Designed on the principle of a miniature screw jack, this accessory is almost impossible to use, and is not worth the trouble or cost.

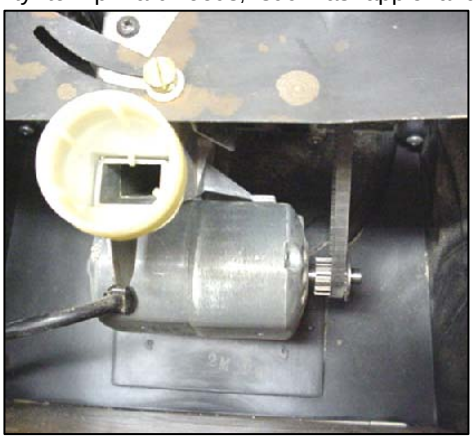
If you don't have the resources to build your own height adjustment tool, Ray Oswald suggests feeler gauges. Simply stack the correct combination of gauges on top of each other, place a tool bit on top of them, and bring the blade up to the bit, so it barely touches. This is time consuming, but it is quite accurate.



Being a retired machinist, Ray incorporated some excellent modifications into his Preac and Dremel saws. His rip fence devices were especially nice. Although the Preac saws were the primary topic at this meeting, Ray showed that the discontinued Dremel could be made into a viable power tool.



The big knock with the Dremel has always been that this saw is underpowered. Many model ship builders (including this writer) were immediately disappointed with this machine's inability to rip hardwoods, such as apple and cherry.



Ray solved the problem by installing a cog belt and compatible pulleys. Oswald felt that it was merely a case of belt slippage, which was causing a loss of power. Replacing the stock blade with a carbide tipped unit was the final piece of the puzzle. Ray has been able to cut stock up to ¾" thick!

Of all the saws on display, Tim Riggs' Preac probably sported the most upgrades, and it would be safe to say that it was undoubtedly the most accurate. Tim designed two brackets, which allowed him to use micrometer heads on the height adjustment and rip fence. Riggs also improved dust control and blade changing by building a split guard out of sheet aluminum. It is held together with rubber bands for easy removal!

Tim's rip fence modification was especially sweet. The use of a digital micrometer gave excellent accuracy, and the ability to zero the readout after every adjustment. This made it possible to cut strips dead accurate without having to do mathematical gyrations every time! The only drawback to this setup was the fact that the micrometer had only one inch of travel. This was overcome through the use of an aluminum block 1" X 2" x 3". Every time the micrometer reaches its limits, Tim retracts it and turns the block to the next largest dimension, and continues.