NTRAK Modular Railroading Society, Inc.

N-Scale Modular Railroading

Tips N SCALE Techniques

Portable NTRAK Module Storage Cabinets

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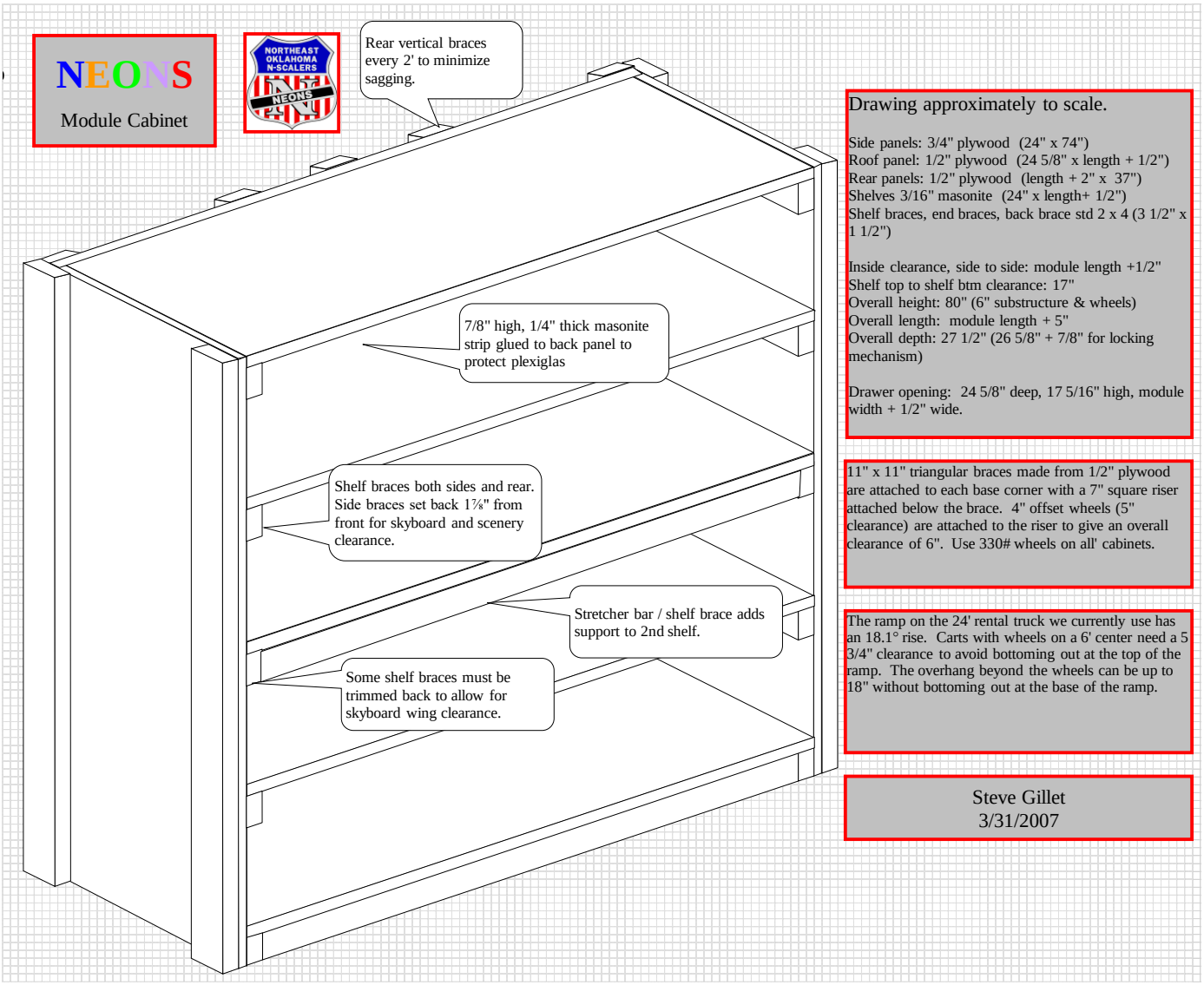
The NorthEast Oklahoma N-Scale (NEONS) club and its members have over 50 NTRAK modules of various shapes and sizes. Most of them must be stored when not in a show layout and must be transported to and from shows. Our solution to was to design wheeled cabinets to house the modules. The cabinets are built like a chest of drawers, with the modules acting as the drawers. When slid into a slot in the cabinet, the module's skyboard acts as the drawer front and semi-seals the module in the cabinet, minimizing potential damage and the accumulation of dust, as shown below.



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All of the cabinets are 27” wide and 80” high so that they will fit through a standard door frame. The cabinet length is 5” longer than the modules they hold, i.e. a 4’ module cabinet is 53” long, a 6’ cabinet is 77” long and an 8’ cabinet is 101” long. Heavy-duty 4” swivel wheels are mounted on the base of the cabinet, giving it a clearance of 6” so it will not go high-center when going up a loading ramp into a truck.

Details, including drawings, pictures and other information on these cabinets can be found on the NEONS website. at: http://www.tulsa-neons.com/construction/storageCabinets.html

The NEONS module guidelines specify that the skyboard should extend 12” above the surface on which the tracks are laid. On a standard module built with 1 x 4 sides, and a ½” plywood top covered by a sheet of ¾” foam, the total height of the module is 3.5” + 0.5” + 0.75” + 12” for a total of 16 ¾”. A cabinet can have four 17” clearance drawer slots even with a mid-high 2x4 horizontal brace, and still meet the 80” max and the 6” base clearance requirements. All our modules have hinged legs that fold up and latch under the module and Velcro straps secure all pigtails and other normally hanging wires so they will not be crushed, crimped or otherwise damaged while being stored. As further security, Masonite sheets are screwed into the base of each drawer slot to eliminate any possible damage to a lower module if something comes loose on the one above. Our modules also have a sheet of 3/16” thick Plexiglas attached to the front fascia board. This Plexiglas shield starts about 2” above the bottom of the fascia board, so we glue two strips of 1/8” Masonite to the back of each shelf just above the drawer bottom so the Plexiglas will not rub against the back of the cabinet. Photos below.

Each module has one or two nylon straps attached to the skyboard to aid in extracting the module from the cabinet. Fold down 2” x 6” aluminum strips are attached on both sides of each slot to lock the module in place. Pull ropes are secured to each end of the cabinet for front and rear steering when the cabinets are moved. A large eye bolt is attached to each end so the cabinet can be secured when it is packed in a truck for transportation to a show. (Photos below)

With our old stacker system, we could reduce the height of the stack by stacking fewer modules. This gave us some flexibility when traveling to smaller shows with a smaller layout and a smaller truck. Unfortunately, our 80” tall cabinets will not clear the door of smaller rental trucks and necessitate the use of a large, 24’ box truck that has an 80”+ door clearance, whether we need that much space or not.

The NEONS currently have four 4’ cabinets, four 6’ cabinets and two 8’ cabinets. Our 8’ cabinets are slightly modified to store our two 6’ inside corners in each top shelf. Two of our 4’ cabinets have been modified so that the bottom two drawer slots are used to store our clamps and stanchions. This bottom area has a removable Masonite lid. When the lid is in place, it acts as a shelf for miscellaneous storage (photos below). Also notice the next-to-bottom shelf in the top right photo on page 2. That is a narrow 4’ corner module that fits perfectly in a 6’ cabinet. Scrap pieces of skyboard are screwed onto a triangle of 2’ x 4’s to latch the corner module into place.

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Our cabinet style module storage system has reduced our setup and teardown time by over one hour. They are safer, sturdier, and provide a much greater level of protection for our modules. However, after using them for several shows, we made a few modifications that made loading and unloading the cabinets much easier. We found that the latch stops on the front would hang up on the next module when being loaded or unloaded. There are two improvements that fix this problem 1st, we took some 2" x 4" boards, cut them to be 1½' x 1" and trimmed them to the length of the cabinet with a 45° miter at each end. They were attached to the cabinets along the front of the cabinet base. 2nd, on the back side of the cabinets, the vertical braces would catch on the next module, so we inserted short pieces of 2' x 4" boards along the top and bottom of the cabinets that filled the gaps between the vertical braces. These two improvements alleviated our loading/unloading problem.

Author

Steve Gillett of the Northeast Oklahoma N Scale (NEONS) club is the author of this TipsNTechniques.