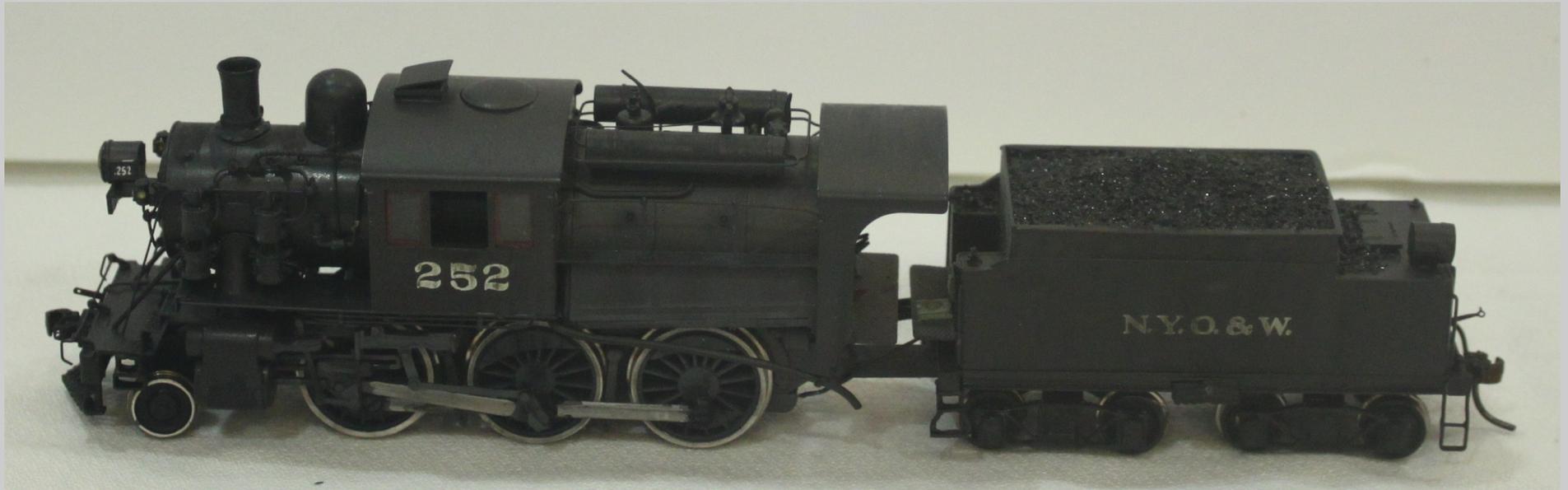


Fall 2019 Baldwin Trophy Winner

Malcolm Houck's NYC&W Class R 2-6-0



New York Ontario & Western RY Class R Double Cab 2-6-0 is built in HO Scale from scratch, using a "catalog" diagram (published in a 1966 issue of RMC) from the prototype builder, Dickson Manufacturing Company of Scranton, PA. The eleven O&W Class R locomotives were outshopped by Dickson between June and August 1890, immediately following a group of virtually similar engines delivered to DL&W.

To begin a frame was milled from 1/2" Schedule 360 brass channel, in several discrete operations. Once then set on driving wheels a bottom retainer plate was machined from 1/8" X 1/2" 360 brass and mounted with 2mm machine screws. All measurements then are taken with the frame and mechanism standing on its driving wheels. Frame and mechanism is ultimately comprised of 27 scratchbuilt parts.

Side rods and main rods are laid out and cut from 0.016" soft nickel sheet, drilled, rough milled to shape and finished with selection fine files and shop-made sanding sticks and sanding files.

The cylindrical boiler sections are machined from 360 brass rounds. The firebox, backhead, cab, running boards and pilot deck are all cut from a variety of thicknesses of brass sheet and formed, as needed, using either different sizes of brass mandrels, bending jigs or a set of sheet metal forming pliers.

The tender is built from scratch with the tender cistern rivets impressed using a shop-made modification to a NWSL "Riveter" and employing a shop-made punch-and-dies cut and machined from so-called "01 oil hardening" steel, then heated, quenched and tempered. The tender floor is fabricated from a variety of brass sheet, brass plate and brass shapes.

Final details are a mix of lost wax cast details from commercial sources as well those machined or fabricated at my shop work bench. After a completed assembly and test running the entire engine and all sub-assemblies are torn down, cleaned in an ultrasonic cleaner, dried and blasted with #400 Aluminum-oxide in an enclosed blast cabinet.

Finishing, is via airbrush coating with clear Steelcote "Stays-on" shellac based primer, followed by an airbrushed non-specific mix of Scalecoat black, MOW gray and Boxcar red. Lettering is done with custom decals printed in Sterling, Mass. and then final dulling and sealing coat of Lacqua-Mat brand spray. Touch-up weathering is one of, or a selection and combination of, airbrushed colors, dry brushed acrylics or oils, thinned inks and chalks chosen depending on the effect desired.