



## The Rebuilt Merchant Navy Class



Aster Rebuilt Merchant Navy - commissioned by Aster UK  
photos of a prototype model - representing a work in progress

Aster Hobbies (UK) has announced the much requested Rebuilt Merchant Navy class is now being developed. They have chosen to model 35028 'Clan Line' which was purchased directly from British Railways in 1967 by the [Merchant Navy Locomotive Preservation Society](#) (MNLPS) and is still in the tender care of this remarkable organization 46 years later!

The model will have three cylinders controlled by three sets of Walschaert valve gear. Slide valves will be employed since piston valves are not practical for this particular model. An alcohol fired boiler with all the regular facilities will be provided. The loco will be modeled with the 6000 gallon 'third series' tender. The opportunities for modeling other popular Merchant Navy Class members will be possible – 35027 'Port Line' which is currently having a major overhaul, springs to mind.

The emphasis in the UK will be on unnumbered kits. A very few factory built models will also be available as 35028 'Clan Line'.

Our model will be based on 35028 'Clan Line' with 6000 gallon tender. It will have 3 cylinders and fully operational Walschaert valve gear. Factory built-up for the UK will be numbered and lettered – 35028 'Clan Line' whereas kits will not be numbered for customer's choice.

Delivery date is projected for spring 2014.

Oliver Bulleid is generally considered to be the last giant of British steam locomotive design. A highly innovative engineer but often considered to be something of a 'maverick', his Merchant Navy class of 30 locomotives were originally considered a disappointment but following rebuilding in the 1950's are now very highly regarded by railway enthusiasts.

Bulleid had been the personal assistant to Sir Nigel Gresley at the London & North Eastern Railway and had been a major contributor to

Gresley's many successful locomotive designs. In 1937 Bulleid got his chance to develop his own ideas when he was appointed as Chief Mechanical Engineer of the Southern Railway. He almost immediately embarked upon a major new design for the heaviest express trains departing London's Waterloo and Victoria termini.

Today it seems incredible that during the darkest days of the Second World War that authorisation should be given to build a highly innovative express passenger locomotive design. But in 1941 the first Merchant Navy locomotive - 21C1 (later 35001) 'Channel Packet' was built and subsequently a further 29 locomotives followed through until 1949.

The appearance of the Merchant Navy class as built strongly resembles the later West Country / Battle of Britain class. Aster enthusiasts will recall that a gauge one live steam model of the West Country / Battle of Britain class was manufactured by the Aster Hobby Co Inc in 2006. The difference between the two designs being that the Merchant Navy class was considerably bigger than the West Country / Battle of Britain class and could only be used on the major main lines due to heavy axle loading. The lighter and less powerful West Country / Battle of Britain class Pacifics could be used almost everywhere else within the Southern Railway system.

The 30 Merchant Navy class locomotive suffered many operational problems mostly due to Bulleid's untried and untested innovations. By 1955 British Railway's engineering management decided that the only way to proceed was to completely re-engineer the Merchant Navy class. Consequently the air-smoothed casing, chain driven valve gear and other novel Bulleid features were removed and replaced by less troublesome conventional components. These modifications described as "rebuilding" completely changed the look and reliability of the whole class of locomotives. The first locomotive to receive the treatment was 35018 'British India Line' in 1956. The final example was 35028 'Clan Line' in 1960.

The Rebuilt Merchant Navy class were used on the heaviest express trains, for example the Bournemouth Belle and Atlantic Coast Express. Also the heavy Pullman service operating in association with international passenger services through Southampton's Ocean Terminal.

The names of this class are taken from the World's great shipping lines and include – 'Peninsula & Orient', 'Canadian Pacific' and 'United States Lines'. Today no fewer than 11 members of the class still exist of which 10 are preserved or in the course of restoration. 35029 'Ellerman Lines', is sectioned to show the internal workings of a steam locomotive at the National Railway Museum, York.

The Aster Hobby Co Inc and Aster Hobbies (UK) LLP express their sincere thanks to the Merchant Navy Locomotive Preservation Society owners of 35028 'Clan Line' for their help in the preparation of the Aster Rebuilt Merchant Navy class model.

Andrew Pullen  
Aster Hobbies (UK) LLP

## **Draft Specification**

**Scale and Gauge:** 1/32nd scale for Gauge One - 45 mm / 1.75" track.

**Wheel Arrangement:** 4 - 6 - 2 Pacific. Driving wheel Dia. 59.00 mm, Bogie wheels Dia. 29.9 mm, Tender and rear pony wheel Dia. 3.4.00 mm

**Axle Driven Pump:** Bore 5 mm x Stroke 6 mm.

**Cylinders:** 3 cylinders, Bore 12 mm x stroke 20 mm.

**Valve Gear:** 3 independent sets of Walschaert valve gear adjustable from cab.

**Boiler:** JvR multi-tube copper 'C type' boiler. Water capacity 255 ml at 80%. Silver soldered throughout - working pressure 60 psi - 4 Bar. Multiple jet blast pipe arrangement.

**Boiler Fittings:** Safety valves, pressure gauge, water gauge with blow-down valve, regulator valve, blower valve and superheater.

**Lubricator:** Roscoe displacement type.

**Tender:** Hand pump - bore 11 mm x 12 mm. Water Tank Capacity 190 cc. Fuel: Methylated alcohol. Fuel Capacity 180 mls.

**Minimum Radius:** TBA



Bulleid rebuilt Merchant Navy class Pacific 35028 Clan Line at Westbury station on 7 February 2007. Photo by Adrian Brodie



Bulleid rebuilt Merchant Navy class Pacific 35028 Clan Line at Westbury station on 30 July 2007. Photo by Adrian Brodie



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