

The name Octo was briefly used by Mercer in connection with special chronometers and clocks for survey, geodetic and scientific purposes. The name Octo was also used for the master clock and all the associated slave clocks on board ship.

Because a pendulum clock is useless at sea, a normal balance wheel and lever escapement clock was used as the master clock; or sometimes a chronometer with a detent escapement when the highest level of accuracy was needed. For instance, this would be in large ships with important functions and servo-controls that needed to precisely synchronized with GMT.

Mercer's system of controlling ships clocks consisted of an electrically rewound master clock with chronometer or lever escapement and fitted with contacts which operated through a Control Panel for updating the electrically impulsed slave clocks. Control panels were made in two basic types: hand-operated and automatic.

Mercer, as a major supplier of detent chronometers for navigation, supplied many hundreds of these systems in their long history but, as with the Gents marine system, very few seem to have survived.

As a general rule, the name Octo was only used for Mercer's chronometers, clocks and slaves that were fitted with electrical contacts and the name did not appear on their navigation chronometers. Mercer did make the detent chronometer version of their ship's master clock with the capability to do both jobs, however, I understand that ship's captains and navigators preferred to carry a hand wound chronometer, dedicated to navigation, that would not fail if something went wrong with complex and electrically re-wound Octo master clock system.

It is possible that your detent escapement Octo was used for both navigation as well as the control of ships clocks but the look of the cabinet and control panel suggest that it would not have been in the chart room and was only used as the ship's master clock.

In the ship's master clock system (as in factories and offices), pulses were distributed to slave dials in various rooms and cabins; but in addition, a complex control system was needed to advance and retard the slaves as the ship moved through time zones.

As a ship moves through time zones its navigational chronometer stays on Greenwich Time. But to show the time at Greenwich in cabins, dining rooms, and other public rooms is pointless and confusing. It is better for these clocks to show local time. The advance and retard of clocks to keep abreast of local time was carried out by setting the pointer on a control dial to the required adjustment.

Mercer was one of the earliest companies to provide clocks for this purpose and introduced the Octo System for ship's clocks in 1927. As far as Mercer was concerned, these systems for distributing time around a ship were called Control Panels, not master clocks, and varied in size and specification depending on the size and purpose of the ship. The basic apparatus consisted of a system of electrical relay circuits mounted in a teak case with pilot dial and fitted with advance and retard dials, to which electrical impulses are transmitted at half minute intervals by its controlling detent chronometer or lever clock. Control Panels controlled all the time-keeping apparatus throughout a ship and could have their own lever or detent escapements and fitted with ½ minute contacts. Alternatively, the control panel could be synchronised or driven directly from a special detent chronometer in the Chart Room and this was the usual method used by Mercer at the start of the Octo system.

Stand alone Mercer chronometers with electrical contacts occasionally turn up in the surplus market or at clock fairs. These are invariably survey and map making chronometers with seconds (not 1/2 minute) contacts that have become separated from the recording chronographs with which they were used and have nothing to do with distributing time. At MOD auctions these chronographs have usually been listed and sold separately from the chronometers because the auctioneer has not realised that they are part of the same kit.

I discovered in my conversations with Tony Mercer that they were not able to use the name OCTO for very long. The company failed to notice that when they introduced the Octo system in 1927, the OCTO name was already in use. It was the name of a well-established Swiss watch company - OCTO S.A. at La Chaux de Fonds - that had been in existence since 1848. Many years later OCTO S.A. eventually noticed Mercer's use of the name and challenged Mercer's right to use it. Mercer was forced to withdraw and thereafter the system was simply named Mercer Chronometer Controlled Clock Systems. Tony would have been at school in the Octo days and his memory was hazy about dates but it would have been during the 1930s that the Octo name had to be changed.

There is some evidence from serial numbers that it lasted until about 1940 but serial numbers are often unreliable depending on how they are allocated..