ECS - Survey of 1-second master clocks

I am researching English Clock Systems Ltd one-second pendulum master clocks, and would greatly appreciate feedback from people who own, or know of, examples of these clocks.

The purpose of the research is to correlate design changes with serial numbers, and to try to establish how serial numbers relate to dates of manufacture.

Please enter the relevant information in the response boxes below, and then save this PDF document using 'Save As', adding the serial number of the clock to the file name. Once completed, please email this PDF document to martin@englishclocksystems.co.uk with a subject line of 'Survey response'.

Please note that this response form works best with Adobe Reader versions XI or DC, or later. Adobe Reader X (and earlier versions) does not allow you to save and recover your data. Other PDF readers may also not work with saving the data.

If you own or know of more than one clock, please submit a separate form for each clock.

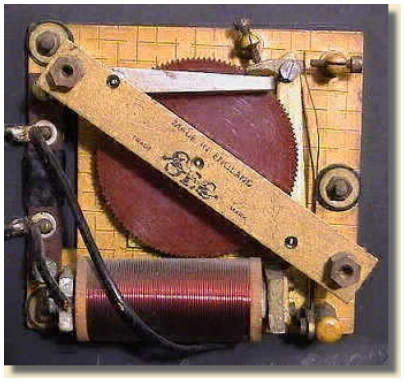
The research was started in 1999 and will continue for some time, so information on any examples you spot in the future will be welcome.

Thank you for your help.
(All information supplied will be treated in strict confidence.)

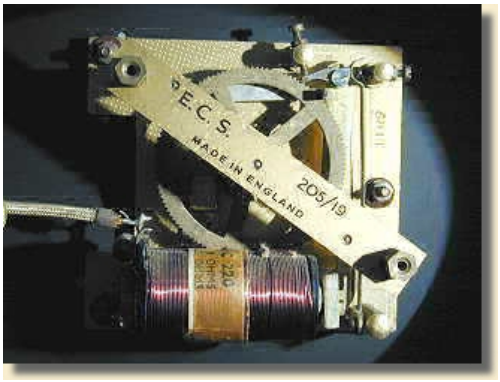
The location of a clock is never requested by the survey - the only contact information required is an e-mail address.

Things to look out for in your clock when completing the survey.

Differences in pilot dial movements:-



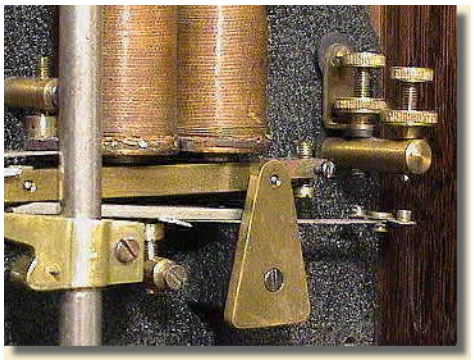
Early style slave with composition index wheel, not crossed out, and type number on front plate (behind wheel).



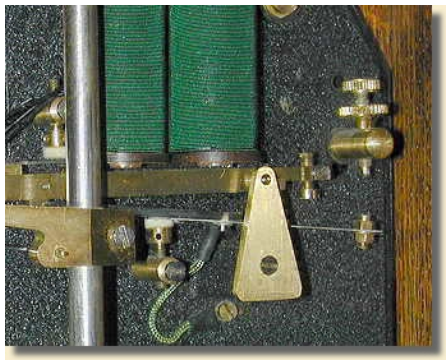
Later style slave with brass, crossed out index wheel, and type number on bridge plate.

There is also a 2, 3 or 4 digit number stamped into the rectangular brass front plate of many slave movements. It is visible at the top right of the right hand picture above. (N.B. It is not always in that position, and could be partly obscured by the armature). This is a date code, and should be quoted as 'Pilot dial date code'.

Difference between single and double contact systems:-



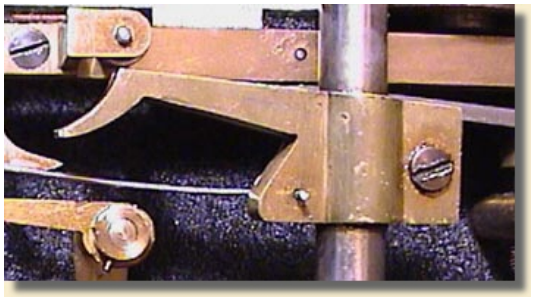
Double contact system.
Both contacts are on the pillar, with the rear contact mounted in an insulating bush; the moving arm (below) simply bridges the two fixed contacts to complete the circuit. The Link from the rear contact to the base plate is either a Brass L-plate as shown, or a flexible wire link.



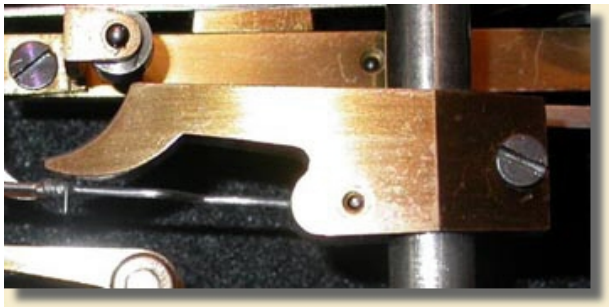
Single contact system.
One contact is on the pillar, and the other contact is on the movable arm. The circuit is completed via the movable arm, with a flexible wire back to the base plate.

Differences in the impulse pallet:-

There are differences in the design of the impulse pallet, both in the shape of the pallet around the pendulum rod



Type 1 - Curved around rod



Type 2 - Diamond shape around rod

and in the profile of the slope down which the impulse roller runs:

Type A - Shallow curve

Type B - Steep curve

Please note that the thickness of material under the curved surface is not what I am asking about; it's the profile of the curved surface that is important. The two left-hand pictures above (Type 1 and Type A) have the same curve, despite a difference in the thickness of the brass below the curved plane.

THE SURVEY

Your name:

Your email address:

Your name and e-mail address will be kept confidential and you will only be contacted if a response on this form needs clarifying. If you do not wish to include your name or e-mail address, your response will be anonymous, but still welcomed. It will, however, make further research of your clock impossible.

MASTER CLOCK DETAILS

Serial number on A.R.N. plate:
(please include any prefix or suffix e.g. 1021/S)

Case style:
- ○ Square top
- ○ Round top
- ○ Other (special case designs)

Gravity arm contacts:
- ○ Double contact
- ○ Single contact
- ○ Other (special modifications)

If double contacts, what form is the link from the rear contact
- ○ Brass L-plate
- ○ Wire link

Impulse pallet shape around pendulum rod (see images above):
- ○ Type 1 – Curved around rod
- ○ Type 2 – Diamond shape around rod

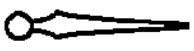
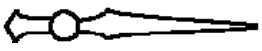
Impulse slope profile (see images above):
- ○ Type A – Shallow
- ○ Type B – Steep

Pendulum lower suspension spring block:
- ○ Two piece construction
- ○ One piece construction

PILOT DIAL DETAILS

Dial style:
- ○ Roman numerals
- ○ Arabic numerals

Dial finish:
- ○ Silvered
- ○ Painted

Hands style:
- ○ Old style 
- ○ New style 
- ○ Intermediate style 

Inscription on dial:

Pilot dial index wheel:

- ○ Brass
- ○ Composition (looks similar to brown printed circuit board)
- ☐ Crossed out

Pilot dial type number (e.g. 205/19)

Location of type number

- ○ Front plate
- ○ Bridge

Pilot dial date code:
(2, 3 or 4 digit number stamped into brass front plate)

GENERAL

Any dating evidence: (Records of original installation of clock; purchase invoices; hand-written notes on clock; etc)

Any other markings or inscriptions on the clock: (e.g. Maker's name/logo on some slaves or beat plate)

Do you have any printed material that may help to identify the development of the ECS Master Clock (e.g. catalogues, magazine articles)? If so, please describe briefly stating the source, including a date if relevant. I will contact you if cannot find a copy.

Any other comments: (e.g. Accuracy or reliability of clock)

Please save this PDF document using 'Save As' adding the clock's serial number to the file name so that you do not over-write the original blank form. Email the completed form to martin@englishclocksystems.co.uk . Many thanks for taking time to respond to the survey.