



HQS Wellington, Temple Stairs, Victoria Embankment, London WC2R 2PN
Tel: +44 (0)20 7240 3973 Fax: +44 (0)20 7240 3518 Email: office@impahq.org Web: www.impahq.org

Our Ref: Ship Engine Performance

Date: 16th January 2020

IMPA NOTICE NO 933

Dear Colleagues

You may be aware that IMPA submitted a paper to IMO last year about incidents involving Ultra Large Container Vessels. One of the points made by IMPA, and accepted by IMO in the report, was software management of main engines was increasingly interfering in vessel control and causing great problems for Pilots.

Subsequently a number of members have reported instances, of all types of vessels, which do not respond adequately to telegraph orders.

At the end of 2019 IMPA met the ICS (Shipowners) in London and found a lot of common ground. Consequent upon that meeting the Executive have decided to proceed on two fronts.

Firstly, IMPA wants to caution members about the unintended consequences of industry's drive to reduce air pollution and improve engine efficiency. This trend will not reduce, and the problem will not get better.

Whilst engine management software appears at the root of a lot of problems it is not the only factor in the lack of responsiveness. Other factors are: -

- These very long stroke slow speed engines are mechanically hard to accelerate
- The larger propellers represent a very large inertial mass, again preventing rapid pick up in r.p.m.
- There is other, non-software, tuning which is geared towards low emissions which impacts on engine pick-up.
- Some engines have been de-rated by blanking off turbo chargers, sometimes from 3 to 1 which has a severe impact on performance.

IMPA believe that members now need to ask more questions of vessels before and during the MPX. Some Pilot groups already have a pre-call list of questions such as: -

- Guaranteed RPM within 15 seconds at given draft, and speed through water this equates to.
- Ability to override load/torque limits
- Confirmation Master is willing to override as above
- Safe working load of aft bollards/bitts
- Rudder type, size and degrees of operation

IMPA have agreed with ICS that the "Pilot Card" needs amendment, but this is a relatively longer-term goal, compared to the immediate problems.

The ICS also accept the inevitability of greater tug use in the future as a result of the trend in propulsion management.

IMPA will be putting in a 'comment' paper to IMO's MEPC meeting in April about this issue, pressing for override of software to be automatic under Pilotage. The Association will also be meeting with IACS (The classification Societies) about this issue as there is evidence that engine

manufacturers might be pressurising owners to accept the software as part of guarantee arrangements.

The second issue is for IMPA to be better informed when it meets ICS, IACS and of course at IMO. Currently we have little written evidence, but a raft of anecdotes!

We would appreciate members submitting brief notes by e-mail of ships where handling was impaired/hindered by engine management software, where Masters are prevented by their offices from overriding software, potential (or actual) accidents, increased tug use, and new operational limits. Members names will not be collected or used.

Finally, IMPA would appreciate, as part of this study, more information on the % astern power shown on Pilot Cards. IMPA has been astonished to find many vessels only offering 20-30% of ahead revolutions. IACS rule M25 specifies 70% of ahead revolutions.

Copies/phone pictures of such cards would be appreciated.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Nick Cutmore', written in a cursive style.

Nick Cutmore
Secretary General