News on steady and quasi-steady trials and monitoring

-----Original message----including some [addenda]

From: Michael Schmiechen Sent: Wednesday, April 30, 2014 5:23 PM To: Angelo Olivieri ; Anton Minchev ; G. Grigoropoulos ; Henk van den Boom ; Heungwon Seo ; Jinbao Wang ; Masaru Tsujimoto ; Michio Takai ; Solia Werner ; Uwe Hollenbach ; Wojciech Gorski Subject: News on steady and quasi-steady trials and monitoring

Dear colleagues of the ITTC Specialists Committee on the Powering of Ships in Service, dear friends and fans of my rational theory of propulsion,

after all I have finished my studies PATE_01 and 02 of the trials with two sister ships in the East China Sea with an analysis based on three double runs only, as usually performed. The results confirm the stability and objectivity of the rational procedure for the evaluation of traditional steady trials I am promoting. The pertinent file PATE_01.3 including all the details is to be found on my website <u>www.m-schmiechen.de</u> under 'News on ship powering trials'.

Subsequently I have revisited my first analysis of a quasi-steady 'model' trial documented in my 'Festschrift' commemorating the quasi-steady propulsion tests with the research vessel METEOR in the Greenland Sea in November 1988, published on occasion of the 108th Annual Meeting of Schiffbautechnische Gesellschaft at Berlin in November 2013 and to be found under 'News on ship powering trials' as well.

As it turned out, the unsatisfactory results of the first analysis, excluding (!) the measured thrust data, had been caused by a simple, not to say stupid mistake in data transmission from the earlier rational and traditional analyses of [one of] the model test, performed on 09.09.1986 before the full scale METEOR tests [in order] to check the feasibility of the quasi-steady procedure.

The re-analysis of the data of the quasi-steady propulsion test of only two minutes duration without thrust data and any other prior data (!) permitted to identify the resistance and the propulsive efficiency [of the model, 'accidentally'] in perfect agreement with the results of the hull towing test and the traditional evaluation based on the propeller open water tests.

All details of the analysis and some conclusions concerning further developments] are documented in the file mod_trial 21.pdf attached and to be found under 'News on ship powering trials' together with the basic analyses mod_evaf.pdf as well.

My results [based on the simplest possible, [the traditional] energy balance] permit the conclusion that the basic routine developed will permit to identify the resistance and the propulsive efficiency at full scale quasi-steady trials and monitoring of less than an hour duration under service conditions without anybody even noticing that such tests are being performed.

Thus there will in future be no need to base the evaluation of powering performance on [values of] the propulsive efficiency pulled as joker out of the sleeve as proposed in the STAimo method promoted by MARIN and (to be?) adopted by ITTC, ISO and IMO, following the emperor in his new clothes.

Looking forward to future joint developments of trials and monitoring systems based on my extremely simple routine meeting the requirements [of transparency and objectivity and thus] (and) the purposes of generally acceptable, lasting standards ISO 15016 and ISO 19030 [in particular],

I remain with my best regards yours, Michael Schmiechen.