*Note: The following are original messages with minor corrections and [additions] necessary.* 

## Recent rational evaluation of another traditional trial and further

Dear colleagues,

as you will conclude from my mails to colleagues on the ITTC Propulsion Committee und des ITTC Specialists Committee on Powering of Ships in Service, concerning my recent rational evaluation of another traditional trial and a related open letter, my work on trustworthy full scale proofs of powering predictions continues subsequent to the evaluation of the ANONYMA trials.

Talking to young colleagues involved in the work on the standards ISO 15016 and ISO 19030 I understand that they are upset by the 'practices' of IMO, ISO, DIN, ITTC and, last but not least, MARIN in 'settling' problems of common concern.

They no longer want tricks, jokers pulled out of sleeves and majority votes of specialists adhering to the ideas of their great-great-grandfathers, but they need power tools adequate for the problems at hand and providing solutions lasting at least for the coming decades of their professional lives.

Reference to 'the joker pulled out of the sleeve', namely the propulsive efficiency of the 'direct power method', is more specifically to the point, hitting the nail right on the head, while my reference to Andersen's tale 'the Emperor's New Clothes' highlights the whole situation.

With many thanks for your kind attention and my best regards yours, Michael Schmiechen.

From: "Michael Schmiechen" <m.schm@t-online.de> To: "Didier Frechou" <didier.frechou@dga.defense.gouv.fr>; "Chenjun Yang" <wangxuef@sjtu.edu.cn>; "Emin Korkut" <korkutem@itu.edu.tr>; "Moon Chan Kim" <kmcprop@pusan.ac.kr>; "Rainer Grabert" <grabert@sva-potsdam.de>; "Steve Ceccio" <ceccio@engin.umich.edu>; "Takuya Ohmori" <takuya\_omori@ihi.co.jp>; "Tom Dinham-Peren " <tperen@bmtdsl.co.uk>; "V. Borusevich" <borusevich64@mail.ru> Cc: "Anton Minchev" <ami@force.dk>; "Aage Damsgaard" <aad@force.dk>; "Gerhard Strasser" <prof.dr.g.strasser@sva.at> Sent: Thursday, February 20, 2014 10:28 AM Dear Colleagues,

attached please find an open letter and the rational evaluation of another traditional trial, both of which I have forwarded to your colleagues at the Specialists Committee on the Powering of Ships in Service.

There is not much to be added, except for the fact, that since I wrote the letter to your colleagues I happened to check the website of ITTC again. And to my surprise the ITTC 2012 Guidelines for the evaluation of trials has popped up again, although contrary to the repeated claim, it has not (!!!) been approved by the ITTC.

The introductory text states, that "in order to support the efforts at IMO in relation to the introduction of EEDI regulations, ITTC has updated the speed and power sea trial procedures outside the normal sequence of work. The updated procedures submitted to IMO may be found here".

Evidently "outside the normal sequence of work" is a euphemistic, purposely misleading description of the fact, that this important Guideline has not (!!!) been approved by the 27th ITTC, Date 2012, as the Full Conference, the body to approve or rather not to approve, will take place at Copenhagen only in early September 2014.

Further studying the 'new' Guideline I noticed, that hardly anything has been corrected, since I have critically scrutinised its first version in great detail and pointed out the serious deficiencies in the Chapter '4.3.4 The Emperor's New Clothes' of my paper on 'Future Ship Powering Trials and Monitoring Now!'

This paper has first been published early in 2013 and again in the volume 'From METEOR 1988 to ANONYMA 2013 and further!', published on occasion of the 108th Annual Meeting of Schiffbautechnische Gesellschaft held at Berlin in November 2013 (VWS Mitt 62 (2013), pages 1 thru 44).

The crucial paragraphs in the first sections of the ITTC 2012 Guideline are pin-pointed here again, but I shall not repeat all the details discussed earlier.

'1. Purpose' remained without change.

"The descriptions for the calculation methods of the resistance increase due to winds, due to waves and the analysis procedure for speed corrections based on relevant research results are modified from ITTC recommended procedures and guidelines (7.5-04-01-01.2/2005), and to fit IMO purposes."

'To fit IMO purposes' is of course a very 'strong' point!

'2. Terms and definitions' remained without change.

Although completely inadequate for the purposes at hand as my evaluations have shown, most recently in the example attached; see also below.

'3. Responsibilities' remained without change.

"Agreement should be obtained concerning the methods used to correct the trial data. The measured data, analysis process and the results should be transparent and open to the trial team."

The procedure following does not meet these basic requirements of agreement, observer independence and transparency, while the rational procedure vidently does, as has been demonstrated over and over again.

## '4. ANALYSIS PROCEDURE

4.1 General Remarks' remained without change.

"The recommended procedure for the analysis of speed trials is the direct power method and requires displacement / power / rate of revolutions / etaD and etaS as input values."

As I have explained earlier, the term 'direct power method' is plain 'des-information'. Although the concept of propulsive efficiency is fundamental for that method, it still does not show up among the 'Terms und Definitions' in the completely inadequate Section 2.

[In section 4.1 it occurs 'even' without a name. Only in section 4.2.3 'Evaluation based on Direct Power Method' it is introduced as "etaD: propulsion efficiency coefficient", a terminology which to my knowledge is not in accordance with the ITTC Terminology.]

The introduction of the propulsive efficiency as input value is in fact the crucial point. To solve this fundamental problem by pulling a joker from the sleeve is a trick, seriously endangering the reputation of model basins and their ITTC. As I have shown in the first exercise of an ongoing project on quasi-steady trials and monitoring, the full scale resistance and propulsive efficiency may be identified without any prior data and, nota bene, without thrust measurements!

Evidently the traditional evaluation, referred to in the evaluation PATE\_01, has been based on the unsatisfactory 'direct power method'. Please do not over-rate the strictly accidental coincidence of the final results for different (!) conditions. But note, that the rational procedure is not only extremely transparent, but it works even in cases, where no prior experience and/or data are available, typically for ballast conditions.

Having contributed to the work of ITTC for twenty years, two terms as Secretary of the Executive Committee and five terms as Member of the Symbols and Terminology Group, I continue to work for ITTC and continue to try and protect its reputation.

Sorry! My introductory remark 'There is not much to be added' was evidently premature.

With many thanks for your kind attention yours, Michael Schmiechen.

From: "Michael Schmiechen" <m.schm@t-online.de> To: "Wojciech Gorski" <wojciech.gorski@cto.gda.pl>; "Solia Werner" <sofia.werner@sspa.se>; "Uwe Hollenbach" <hollenbach@hsva.de>; "Michio Takai" <mic\_takai@shi.co.jp>; "Masaru Tsujimoto" <m-tsuji@nmri.go.jp>; "Jinbao Wang" <wang\_jb@maric.com.cn>; "Heungwon Seo" <hwseo@hhi.co.kr>; "G. Grigoropoulos" <Gregory@central.ntua.gr>; "Anton Minchev" <ami@force.dk>; "Angelo Olivieri" <a.olivieri@insean.it>; "Henk van den Boom" <H.v.d.Boom@marin.nl> Sent: Tuesday, February 18, 2014 4:24 PM

Dear colleagues,

as you see, my work is going on. Following the publication of my evaluation of the ANONYMA trials there is a widely growing interest in the rational approach I am promoting.

Thus, please find attached an open letter and the very detailed rational evaluation of another traditional trial, 'essentially a particularly simple and instructive example of my rational procedure', as stated in my letter to Mr. Ishiguro, who is in charge of the 'harmonised' standard ISO 15016.

'After all' I am looking forward to your Report for the forthcoming 27th ITTC and to the vote of the Full Conference on your Guidelines concerning the evaluation of trials. As this will take place only in September I wonder how Mr. Ishiguro can possibly finish his work by the end of March.

In the meantime an organisation called STAimo (!) again claims that the ITTC 2012 Guidelines have been adopted by the ITTC, although those vanished from the ITTC website, in accordance with the rules of ITTC being replaced by the former Guidelines approved by the 24th ITTC in 2005.

With kind regards yours, Michael Schmiechen.

From: "Michael Schmiechen" <m.schm@t-online.de> To: "Tsuyoshi Ishiguro" <ishiguro-tsuyoshi@jmuc.co.jp> Cc: "Ken Takagi" <takagi@k.u-tokyo.ac.jp>; "Kosei Hasegawa" <hasegawa@jstra.jp>; "Kuniharu Nakatake" <nakatake@ja3.so-net.ne.jp>; "Kinya Tamura" <tamurak@jf6.so-net.ne.jp>; "Naoji Toki" <toki.naoji.mz@ehime-u.ac.jp> Sent: Monday, February 17, 2014 6:37 PM Dear Ishiguro San,

referring to my earlier request for the example of your DIS 15016, after all I 'found out' to my great surprise, that the DIS does not contain any example to be scrutinised! Why did you yourself not let me know this incredible deficiency?

Further, being an 'authority' on trials I am no longer attempting 'to be authorised' (at the incredible costs of over one thousand Euros per anno and per project, not to mention travel expenses etc) to contribute to the work of the German DIN NSMT groups concerned with ISO 15016 and ISO 19030.

But as it happens, subsequently to the presentation of the evaluation of the ANONYMA trials another set of trials data, one of the reference cases of an ongoing research project, has been made available for independent analysis, and the permit to publish the results, together with some results of an undisclosed traditional procedure, has been granted.

For ready reference I attach the resulting paper PATE\_01.pdf, essentially a particularly simple and instructive example of my rational procedure, in its present status. But if you like to refer to the paper, updated whenever necessary and/or requested by anybody, please note that its up-to-date version is to be found on the website www.m-schmiechen.de under 'News on ship powering trials' " or via the link http://www.m-schmiechen.homepage.t-online.de/HomepageClassic01/PATE\_01.pdf.

The name of this and the following exercises in 'Post ANONYMY Trial Evaluations' has purposely been chosen in accordance with the explanation in 'Webster's New World Dictionary of the American Language':

pate (pät). n. [ME.; prob. orig. euphemistic (like Fr. tête, G. kopf, etc.); ? < or associated with L. patina (cf. PATEN)]. 1. the head. 2. the top of the head. 3. intelligence. A humorous or derogatory\* term. (\* taking away, showing disrespect)

Namely, 'taking away' all the superfluous parameters to be sucked from thumbs and 'showing disrespect' for all traditional procedures.

In view of the efficiency of my rational procedure, requiring no prior data whatsoever, I wonder who will possibly vote for your clumsy, hopelessly in-transparent DIS as explained in your presentation at the 7th Asian Shipbuilding Experts' Forum, November 7th to 8th, 2013 in Kobe?

In this context please also note the final paragraph in the Conclusions of my paper, triggered by the incredible 'STAimo' press release and website, reducing IMO and ISO to mere appendices of MARIN, and based on claims, the most basic ones still not (yet?) substantiated!

To repeat my earlier remark: To continue the 'procession' [ignoring basic requirements and the state of research in favour of MARIN's business] is no viable choice [for serious professionals and a responsible community]!

With kind regards yours, Michael Schmiechen.

PS: In view of the current interest in the subject and the standardisation 'developments' this is an open letter, published on my website and personally addressed to colleagues worldwide.

From: "Michael Schmiechen" <m.schm@t-online.de> To: "Tsuyoshi Ishiguro" <ishiguro-tsuyoshi@jmuc.co.jp> Cc: "Kosei Hasegawa" <hasegawa@jstra.jp>; "Kuniharu Nakatake" <nakatake@ja3.so-net.ne.jp> Sent: Monday, January 20, 2014 1:56 PM

Dear Ishiguro San,

since two months now I am waiting for any response on my request for the data of the example in the DIS 15016 for independent analysis. According to the rules of the game no answer is a well understood answer as well.

Thus, knowing the rules of ISO, I am currently applying to be authorised member of the DIN NSMT Working Groups contributing to the revision of the standard ISO 15016: 2003-06 and to the standard to-be ISO 19030.

This will give me the chance to perform the exercise outlined and necessary for the benefit of the standard ISO 15016 and contribute to the work on the evolving standard ISO 19030 on monitoring of the powering performance along the lines of my preliminary exercise documented in the 'Festschrift'.

In the meantime I have updated my 'Festschrift', (and I will continue to do so as appropriate,) distributed on the occasion of the Annual Meeting of the Schiffbautechnische Gesellschaft, the current version always to be found on my website www.m-schmiechen.de under 'News on ship powering trials'.

With season's greetings and kind regards yours, Michael Schmiechen.

Michael Schmiechen, apl. Prof. for Hydromechanical Systems, retired Deputy Director of VWS, the Berlin Model Basin.