



TM/CONF/C.2/SR.1
30 May 1969

Original: FRENCH

IMCO

FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE FIRST MEETING

held at Church House, Westminster, London, S.W.1,
on Thursday, 29 May 1969, at 2.45 p.m.

Chairman: Admiral E.J. ROLAND (USA)
later: Mr. F. SPINELLI (Italy)

Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2, and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

TM/CONF/C.2/SR.1

CONTENTS

	<u>Page</u>
<u>Agenda item 1</u> - Election of the Chairman and Vice-Chairman of the Committee	3
<u>Agenda item 2</u> - Adoption of the agenda	3
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference	3

AGENDA ITEM 1 - ELECTION OF THE CHAIRMAN AND VICE-CHAIRMAN
OF THE COMMITTEE

Mr. DUBCHAK (USSR) proposed that Mr. Spinelli (Italy) should be elected Chairman of the Technical Committee. His energy and his specialized knowledge of the questions the Committee was to study would contribute to the success of the Committee's work.

Mr. CUNNINGHAM (USA) and Mr. SATO (Japan) warmly supported that proposal.

Mr. Spinelli was elected Chairman of the Technical Committee by acclamation.

Mr. Spinelli took the chair,

Mr. CHRISTIANSEN (Norway) proposed Mr. ERICSSON (Sweden), a distinguished engineer, for the office of Vice-Chairman of the Committee.

Mr. GUPTA (India) and Mr. MURRAY SMITH (UK) whole-heartedly supported that proposal.

Mr. Ericsson was elected Vice-Chairman of the Committee by acclamation.

AGENDA ITEM 2 - ADOPTION OF THE AGENDA (TM/CONF/C.2/1)

The agenda was adopted.

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED
BY THE CONFERENCE (TM/CONF/WP.3; TM/CONF/6 and 7;
TM/CONF/9/Add.1)

The CHAIRMAN recalled that the Conference had given precise instructions to the Committee (TM/CONF/WP.3). The analysis of the two proposals referred to it must be very general and the discussion must be restricted to questions of substance and practical application. He invited the French representative to introduce Proposal C, with particular reference to the question of the two parameters.

TM/CONF/C.2/SR.1

Mr. ROCQUEMONT (France) outlined the basic principles by which the authors of Proposal C (TM/CONF/6) had been guided.

The proposal envisaged a system which could be adapted to all ships, whatever their type, regardless of developments in shipbuilding. It laid stress on the future rather than on continuity with the past, although it was eminently suitable for effecting the transition from the present system.

It classified a ship, like any normal object, by its volume and weight, i.e. by two independent parameters. It considered each individual ship as a whole, made no provision for exemptions in the calculation of the volume and expressed the weight, or mass, by the displacement to a given load line. In that connexion, it should be noted that the Moorsom method could not use displacement, as the load line had only been defined by a convention since 1930.

Proposal C avoided the disadvantages of the tonnage mark and exempted spaces, and took account of the interests of shipowners. Its great simplicity also seemed to meet the wishes of the International Association of Ports and Harbors. The use of displacement would enable all ships - and not only those having a complete second deck - to benefit from reductions according to their cargo.

It had the advantage of allowing for fair competition in the shipping industry, thanks to a system of allocating dues that was as just as possible. It did not affect the safety of the ship, it enabled the parameters to be calculated at the design stage, and it would be readily adaptable to the future evolution of shipbuilding. Its many advantages seemed to have been widely recognized. The variant proposed by

Denmark, which took displacement as the only criterion, also had many advantages.

The French delegation was of the opinion that the decision whether or not to adopt the parameter of displacement was one of the essential questions to be solved (TM/CONF/WP.2), especially as it had been agreed that the proposed Convention should not embody the concept of dual tonnage, as related to the tonnage mark (TM/CONF/WP.3).

At the invitation of the CHAIRMAN, Mr. CHRISTIANSEN (Norway) introduced his delegation's proposal (TM/CONF/9/Add.1). He explained that it retained the old volumetric measurements expressed by gross and net tonnage so as to ensure continuity in tonnage measurement, to avoid disorganizing the shipping industry and to create a system which could be applied to all ships in as short a time as possible. It eliminated the definitions of exempted, deducted and completely open spaces, which had led to so many difficulties in the past, whereas Proposal C provided for a definition of open spaces.

A clear distinction should be made between the "values" - gross and net tonnage - and the "parameters" on which they were calculated.

As for the tonnage mark system, shelter-deck ships could get on without it as they had done in the past.

The Norwegian delegation sincerely hoped that the Committee would be able to reach a compromise acceptable to all.

The CHAIRMAN agreed that it would be useful to make a distinction between the parameters (such as volume, displacement, volume of cargo space and deadweight) and the values (gross and net tonnage) obtained from them.

Mr. CUNNINGHAM (USA) stressed another essential element in the Norwegian Proposal which had induced many delegations to support it: net tonnage was calculated by direct measurement of cargo space. Water-ballast spaces were thus indirectly but entirely deducted. That deduction was the condition which the United States had insisted on if it was to agree to give up exemption of those spaces in the calculation of gross tonnage. It was part of a compromise on a matter which had so far been one of the main obstacles to the adoption of a universal system.

Mr. PROHASKA (Denmark) introduced the Danish variant of Proposal C (TM/CONF/7). It was a simple system comprising only five regulations and one parameter, displacement. To enable values nearer to present tonnages to be obtained, the Danish delegation had agreed to express the parameter in tons of 2 cubic metres and not of 100 cubic feet as it had originally proposed. Calculations which had been made for 483 ships belonging to fifteen States Members of IMCO had shown that the choice of that parameter would cause no more disturbance than the other proposals. On the contrary, it appeared that volumetric tonnage gave rise to greater disparities between the different types of ship. It was impossible to avoid entirely penalizing one or other type, but it was essential to devise as fair a system as possible.

Perhaps a compromise should be sought. The Norwegian Proposal was also relatively simple; in calculating gross tonnage, the parameter V+H (TM/CONF/9/Add.1, page 6, Regulation 4) could be replaced by displacement with a modification of the coefficient. The displacement envisaged by the Danish Proposal might also be corrected by a conversion factor taking into account the volume of passenger space. The concept of total volume also deserved close study. But it was more complex than displacement and that was a disadvantage in a period of rationalization. Moreover, it was liable to tempt shipowners to reduce crew space to a minimum.

Finally, if the Committee considered it necessary to retain two tonnages, it would be possible to calculate both of them from the displacement by multiplying it by a different conversion factor. Several solutions could, then, be envisaged.

Mr. DE JONG (Netherlands) said that two main trends of opinion emerged from the discussion and considered that, rather than try to impose either of them, it would be better to seek to bring them together by extracting the best features from each proposal.

One should begin by taking account of what was already in existence, namely, the present values of gross and net tonnages, without forgetting the values used for the purposes of the canals.

Perhaps it would be better to concentrate on the concept of gross tonnage by eliminating at once Proposals A and B and endeavouring to clarify the definition of the second deck. With that object one might, for instance, retain the notion of "underdeck tonnage", as defined in the Norwegian Proposal and, with that as a starting-point envisage the possibility of taking displacement, if necessary corrected by a coefficient, as the parameter.

The problems should be taken one after another and, to start with, perhaps an endeavour could be made to simplify the Norwegian proposal.

Mr. ROCQUEMONT (France) wondered whether, in regard to the measurement of volumes, the Norwegian system was in fact better than the system adopted in Proposal C. Both those proposals made use of a volumetric parameter but the Norwegian delegation claimed that its formula was better since it required no definition of open spaces. The French delegation did not share that view. In point of fact, when one spoke of "measuring" a ship, that obviously meant measurement of its internal volumes so that a definition of the surface separating the outer and inner parts was required. That was what Proposal C did by defining in the clearest way possible the spaces which were completely open. The Norwegian Proposal said, in particular, that the volume of passenger spaces above deck had to be measured. But in that case what was to be done for spaces which could be considered, according to circumstances, either as open spaces or as closed spaces, unless a definition of completely open spaces was arrived at?

It should moreover be stressed that Proposal C also was a compromise between the views of those who were in favour of measuring by volume and those who preferred to measure by displacement, and the success it had already encountered in the course of the discussions which had taken place showed that it was an acceptable compromise.

Mr. CHRISTIANSEN (Norway) explained that the Norwegian Proposal was designed to determine gross tonnage by measuring the total moulded volume of the ship (with a coefficient which took account of the volume of the superstructures and adding to it the volume of passenger spaces,

but that the methods of calculation which would make it possible to arrive at that result had not yet been worked out in detail.

What mattered was that the conversion factors used should be calculated in such a way that the new parameters remained as close as possible to the existing values. It was moreover essential to take account of all the spaces located above the tonnage deck, not only in the interests of safety but also for reasons of a social nature. In that connexion it would doubtless be necessary to define more precisely what was meant by passenger spaces, but those were matters of detail which would have to be examined at a later stage.

Basically, the Norwegian delegation wished to see gross tonnage expressed by a volumetric parameter and wished the old unit of one register ton, equivalent to 100 cubic feet, to be retained.

The CHAIRMAN, summing up the discussion, said that four parameters had clearly emerged, namely, three for the calculation of gross tonnage: the total volume in sea water (Proposal C), displacement in sea water to the water plane (Proposal C) and the volume below deck together with the passenger spaces above deck (Norwegian Proposal), and one for the calculation of net tonnage, namely, the volume of the cargo spaces below deck only, together with the volume of the passenger spaces above and below deck (Norwegian Proposal).

In addition, the Netherlands representative had suggested that an endeavour should be made to simplify the parameters proposed by Norway and the representative of Denmark had shown how that could be done.

Mr. WILSON (UK) said that his delegation was in favour of Proposal C, on the one hand, because it was becoming obvious that the parameters currently in use were not working satisfactorily and, on the other hand, because the existing concepts of gross tonnage and net tonnage had been debased to such a point that they had come to have practically no meaning. It was absolutely necessary to approach the problem in a new spirit and to determine what exactly the functions of the new parameter or parameters to be adopted should be.

The United Kingdom delegation considered, for its part, that such a parameter should first of all express the overall size of the ship. That function was of very great importance to many users (in particular, in regard to national and international regulations, statistics and so forth) and the new parameter must give a real idea of the true size of the ship. It was also essential that that parameter should express the carrying capacity of a ship since the present notion of net tonnage which had been meant to serve that purpose had been greatly debased. Indeed, when the Moorsom system had been introduced all that was sought was to measure the volume of the spaces intended for carrying cargo, which as a general rule meant a single hold. The types of cargo themselves had been very simple: it was mostly a case of bulk cargoes which rarely exceeded the 100 cubic foot "ton". At the present time the very wide variety of cargo carried by sea had led to increasingly complex and ever improving ship designs for which the existing values were no longer appropriate.

From that standpoint, Proposal C seemed to be acceptable, even though it was unfortunate that the Conference was taking place at a time when ship design was in course of being completely

revolutionized and when it was difficult to foresee what the ships of the future would be. The volumetric parameter defined in proposal C could express the ship's size satisfactorily without influencing future design. There was no doubt that volumetric tonnage was a modern and contemporary concept. On the other hand, for measuring the carrying capacity of a ship, displacement would be a satisfactory parameter and would prove to be very useful for ports.

It was true, as some delegations had stressed, that there was no relationship between displacement and net tonnage but there was no reason why there should be. Those two notions could be brought together only by the use of coefficients and it had to be admitted that the abusive utilization of coefficients had for years been IMCO's besetting sin. It would, moreover, be impossible to find a coefficient applicable to all types of ships apart from the fact that, for the same ship, conditions could change according, for example, to whether it was carrying cargo or passengers.

As the representative of France had said, displacement had the advantage of not penalizing ships which carried light but bulky cargo as compared with those which carried high-density cargo.

As for the Norwegian Proposal the first point to be noted was that it was emphatically not true that the calculation of volume was a long and difficult process. In practice, so far as the volume of all the under-deck spaces was concerned, hydrostatic calculations were made in the shipyards for their own purposes and were therefore already available. As for the volume above deck, it could usually be calculated easily. From that point of view, the Norwegian Proposal had advantages over Proposal B. In regard to superstructures, however, it was to be feared that the Norwegian

Proposal would have disastrous effects on ship design, by encouraging shipowners and naval architects to build ships from whose tonnage it would be possible to exclude almost all 'tween-deck spaces. Furthermore, it was essential to define passenger spaces with the utmost care, as the countless attempts which had been made to do so in the past had always come up against the difficulty of deciding when a passenger space was or was not a genuine passenger space. All in all, the Norwegian Proposal was too close to the existing system, which had grave drawbacks for small vessels.

As for net tonnage, the Norwegian Proposal repeated the principles of Proposal B, in which the definition of cargo spaces was entirely inadequate. Under the terms of that definition, small vessels carrying high-density cargoes would enjoy considerable advantages over those carrying light but bulky cargoes. It would also become possible to exclude certain compartments in large container ships, thereby making it impossible to measure such ships properly. As for crew spaces, it should be borne in mind that the minimum standards laid down in the Conventions were always complied with generously and that no shipowner would dream of foregoing an opportunity to improve those spaces for fear of increasing his tonnage.

Mr. ter HAAR (Netherlands), who illustrated his remarks by means of a diagram, said he would like to know what effect the Norwegian Proposals would have on the net tonnage of certain ships as at present built for the carriage of cargoes such as meat and fruit from the Netherlands to Great Britain.

Mr. CHRISTIANSEN (Norway) said he would be glad to deal with that question privately with the representative of the Netherlands.

Recalling Mr. Wilson's statement, he said he had noted several points of detail which called for comments on his part, more particularly with regard to conversion factors, the special difficulties with regard to small ships, the need to avoid penalizing shipowners who wished to give their crews better accommodation, the importance of superstructures and so forth. However, he did not wish to dwell unduly on such details over which the discussion might easily get bogged down. The immediate requirement was to define parameters, which was another way of saying to agree on what should go into tonnage measurement certificates. Afterwards the time would come to determine the method to be employed for those calculations.

Mr. DE JONG (Netherlands) approved of Mr. Christiansen's remarks and suggested that the Committee should first turn its attention to gross tonnage.

His delegation wished to enter at once its reservations concerning the "under-deck tonnage" concept embodied in the Norwegian Proposal. It would prefer to substitute displacement for it.

Mr. CUNNINGHAM (USA) endorsed the Netherlands Proposal and wished the Committee to deal first with gross tonnage questions.

Mr. WILSON (UK) said that when he had spoken before, he had not felt he should limit his remarks to gross tonnage questions. He had attempted to point out the obstacles in the way of a definition of acceptable parameters, to explain

his delegation's view and to make known its objections to the Norwegian Proposal. For the time being, he would merely amplify his previous remarks by saying that he believed the gross tonnages obtained by using the methods adopted in system C to be every bit as close to existing tonnage values as those which would be arrived at under other systems, with the possible exception of vessels in which there was a considerable amount of excluded volume. He added that his delegation had no objection to the conversion factors, provided they could be applied to all types of ships.

Mr. PROHASKA (Denmark) presented a table drawn up on the basis of figures sent to IMCO by 15 countries, showing the relationship of the proposed gross tonnage to the existing gross tonnage, under the various proposals which had been made, for different types of cargo vessel:

	Proposal B	Proposal C (volumetric tonnage)	Danish amendment (displace- ment units of 2m ³)	Norwegian proposal
C (dry cargo carriers)	0.97	1.10	1.06	0.87
B (bulk cargo carriers)	1.03	0.98	0.86	1.01
T (ore carriers)	1.01	0.95	0.97	1.00
R (refrigerator ships)	0.90	1.07	0.86	0.90
Q (ships with raised quarter decks)	1.08	1.08	1.04	0.71

He pointed out that no matter which proposal was adopted, the new system would cause upheavals and that obviously an effort must be made to find the formula producing the least possible distortion. We had already drawn the Norwegian delegation's attention to the fact that its proposal would give small ships an undue advantage. It should perhaps be corrected on that point, or else small ships could be temporarily excluded from the application of the new system.

The reason why Denmark had proposed the use of displacement as the sole parameter was that that country had noted that displacement while, much easier to calculate than volume, also gave results every bit as good as did other criteria.

It should also be noted that the figures given represented averages for the different categories of vessels. Within each category there might be considerable scatter. For instance when the Norwegian proposal was applied to refrigerator ships (average ratio: 0.90), it gave ratios which varied from 0.40 to 1.25. Shipowners would of course take advantage of that scatter, which could not be avoided and which might, in certain circumstances, make it necessary temporarily to maintain existing tonnages.

At all events it was essential to reduce "vertical scatter" and the wisest course would appear to be to choose the simplest possible solution.

Replying to a query from Mr. MURRAY SMITH (UK), who pointed out that the figures did not entirely correspond to those worked out for British ships, he added to his table the following figures for passenger ships:

	Proposal B	Proposal C	Danish amendment	Norwegian proposal
Passenger vessels	0.94	1.00	0.49	0.95
Mixed cargoes	0.97	0.99	0.67	0.97
Ferries	0.93	1.27	0.52	0.95

This second table gave better ratios with reference to Proposal C than the Danish amendment, even though there still remained considerable scatter for each type. It had been thought that the very low tonnages arrived at on the basis of

displacement alone might prove to be acceptable, having regard to the special terms accorded to that particular type of ship which was badly hit by competition from air transport. They could be corrected, however, by the addition of a supplementary coefficient or supplementary criteria, such as passenger spaces, number of passengers - possibly with a separate count for cabin passengers.

Mr. ERICSSON (Sweden) said that the figures given by Mr. Prohaska were of interest, but above all in regard to existing ships.

Mr. ROQUEMONT (France) said that the big advantage of the table was that it showed that, no matter what system was chosen, there would be changes - although he thought that, in the circumstances, the word "upheaval" was an overstatement. The participants at the present Conference were at all events united in the desire to see vessels flying different flags treated in the same way in the same ports. That goal, fair competition, was a feature of all the international conventions concluded under IMCO's auspices, and one towards which all would aim, no matter what system were adopted. When the question was approached in that spirit, the choice of system became almost a secondary matter. The main point was to work for the adoption of a simple system which could be uniformly applied.

The CHAIRMAN reverted to the suggestion of the Netherlands delegation which had been supported by the delegation of the United States and accordingly proposed that the Committee should devote its next meeting to a consideration of gross tonnage questions. Over the week-end, delegations might reflect on the ideas put forward in the course of the initial discussion and check their validity mathematically; in that way the Committee would be in a position to consider practical proposals early in the following week.

It was so decided.

The CHAIRMAN recalled the factors which had been suggested for the definition of gross tonnage, namely, the volume below the tonnage deck, the volume of the passenger spaces above deck (Norwegian Proposal), the total volume of the ship, displacement (Proposal C) - those parameters having been proposed separately or in combination.

Mr. DE JONG (Netherlands) drew the Committee's attention to the formula proposed by his delegation which was set out on page 38 of document TM/CONF/3. That formula in which use was made only of displacement and volume yielded gross tonnage values which were very close to the present values irrespective of the type of ship. The variation of factor "q" conduced to the maximum use being made of displacement for open-shelter-deck ships and of volume for closed shelter-deck ships.

The meeting rose at 5.30 p.m.

7-11-68
11-11-68

Dear Mr. [Name],
I am writing to you regarding the [subject].
I have received your letter of [date] and am pleased to hear that you are interested in [subject].
I am currently [status] and will be able to provide you with the information you need by [date].
I will contact you again when I have more news.
Sincerely,
[Name]

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TM/CONF/C.2/SR.2

30 May 1969

Original: FRENCH

IMCO

FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE SECOND MEETING
held at Church House, Westminster, London S.W.1
on Friday, 30 May 1969, at 9.35 a.m.

Chairman: Mr. F. SPINEILI (Italy)
Secretary: Mr. Y. SASAKURA

A list of participants is given in TM/CONF/INF.1

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TM/CONF/C.2/SR.2

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference (continued)	3

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED BY THE
CONFERENCE (TM/CONF/WP.3; TM/CONF/3;
TM/CONF/6; TM/CONF/7; TM/CONF/9/Add.1)(continued)

The CHAIRMAN reminded the Committee that it had to decide on the gross tonnage parameters to be submitted to the plenary meeting of the Conference on 3 June. One solution proposed was the adoption of a single parameter, whereas others were based on a combination of two parameters; under-deck volume in register tons and the volume of above-deck passenger spaces (proposal by Norway); the ship's total volume, and displacement (Proposal C). The Netherlands delegation had proposed a method which, by applying a coefficient "q", would allow for maximum use of displacement in the case of open shelter-deckers and of volume for closed shelter-deckers.

Mr. ROCQUEMONT (France) thought the parameters could be put into two categories: on the one hand, those considering the volume of the ship as a whole, that is to say, displacement, number of passengers and, taking the broadest possible view, the volume of passenger spaces; on the other hand, those considering only part of the ship. The second category would give rise to difficulties of application and interpretation. His delegation therefore advocated the choice of unequivocal parameters, namely total volume and load displacement.

Mr. GRUNER (Finland) noted that if certified displacement were considered to be equal to the sum of the ship's light displacement and deadweight tonnage, the first and third values were variables and the second a constant. That method of calculation might, if it were in their interest to do so, encourage shipowners to increase their deadweight tonnage - a variable - while the light displacement remained constant.

Conversely, owners wanting a lower deadweight tonnage would be penalized by inclusion of the light displacement in the certification. The formula was thus somewhat unfair and that was why Finland had suggested that only the ship's deadweight tonnage should be certified.

Mr. PRIVALON (USSR) stressed that gross tonnage was the criterion recognized both in international conventions and regulations and in national legislative and administrative provisions. Hence it should not be too difficult for the Committee to arrive at a definition acceptable to all delegations.

Norway's Proposal and Proposal C, both being based on the ship's volume, came near to the principles which his delegation considered essential. However, he did not think that the second parameter should be displacement, which was a variable, but a net tonnage value representing a fraction of the total volume which would be the first parameter. He also felt that Norway's Proposal would be more satisfactory if the gross tonnage expressed the total volume of all closed spaces. If the Committee incorporated in that Proposal certain elements of Proposal C, which the Soviet Union, for its part, favoured, it would be very close to reaching a decision.

Mr. PROHASKA (Denmark) did not think that the adoption of displacement as a parameter would be likely to penalize small ships, as the Finnish representative seemed to fear, for port authorities could levy dues which were not calculated in exact ratio to the gross tonnage.

The representative of the Soviet Union suggested the adoption of a second parameter which would be a fraction of the total volume, the latter being the first parameter. Mr. Prohaska pointed out that, if a country wished to take the total volume into account, it could insert provisions to this effect in its domestic legislation. In regard to port dues, practice had changed over the years: at the beginning of the century, net tonnage had still been the generally accepted basis of calculation, but the current practice of some port authorities was to adopt gross tonnage. The Conference should eliminate the concept of net tonnage and the system of dual tonnage from the text of the Convention and establish a value which would correspond to an exact definition of the ship, that is to say, the certified displacement.

Mr. CHRISTIANSEN (Norway) agreed with the representative of the Soviet Union that the gross tonnage should express a volume but emphasized the need to apply a conversion factor.

Mr. HUNNICH (Federal Republic of Germany) said that, in his opinion, the total volume could be combined with the volume up to the load line with a conversion factor to relate the values obtained to existing gross tonnages.

Mr. GRUNER (Finland) said he was not thinking only in terms of large ships. Port Authorities were not keen on using a sliding scale; they preferred a single figure for the calculation of harbour dues. Under the Finnish Proposal, it was the certified deadweight tonnage which would serve as the basis for the calculation of dues.

Mr. CUNNINGHAM (USA) agreed with the comments of the Norwegian representative concerning the shelter-deck. Thitherto, port authorities in different countries had succeeded in solving their problem by taking gross tonnage as the basis but with due regard to economic considerations. In 1960, at the time of the Conference on Safety of Life at Sea, the shelter-deck had presented a problem because the aim had been to improve the safety of ships. Governments could have proposed the closing of the shelter-deck but they had not done so. Between 1961 and 1969 IMCO had been engaged on the task of finding a solution which would make it possible to increase the safety of ships while maintaining their economic viability. Now a new formula was proposed although little was known of the laws and regulations in force in the different countries. There was a risk of arriving at a solution which could be prejudicial to certain types of ships. The Conference must remember that it was dealing with two existing factors, namely, the shelter-deck and gross tonnage, which, from the economic standpoint, were of great importance to many countries. The total volume would be an entirely new formula unless it were qualified by an appropriate conversion factor. Any decision to exclude the shelter-deck concept might be prejudicial to a great many countries. It was impossible to take an arbitrary decision on the subject and a compromise must be found. If it were decided to abolish the tonnage mark, it was questionable how far that decision would be applied. Shipowners would be guided by economic considerations and only those who would gain some advantage from the change would request the alteration of their tonnage. It seemed essential that the shelter-deck concept should be taken into consideration.

Mr. UGLAND (Norway) fully approved the remarks made by the United States representative. That was why Norway had submitted a compromise solution. The shelter-deck concept was very important to the future of shipping.

As for the concept of displacement, there was no doubt that if it were applied some ships would be seriously penalized and it was very important that ships should not be penalized for increasing their safety. The question of ballast also raised a problem. Everyone agreed that a ship was often more seaworthy if it was ballasted. Why, then, should this factor be eliminated and ships penalized in future if they required ballast? That was what would happen under Proposal C.

It was also important to preserve the register ton of 100 cubic feet as a unit. Norway had attempted to find a solution along those lines. Under the Norwegian proposal it would be possible to obtain a tonnage very close to the present tonnage of standard international vessels. There might perhaps be some difficulties in regard to small vessels, but a solution to that problem could no doubt be found. The Norwegian proposal would also make it possible to fix the tonnage of a vessel in the early stages of its construction, which could not be done under the displacement system because it was difficult to establish the total volume of all the superstructures at the beginning, since a vessel always underwent modifications right up to the moment of its final completion.

The United States representative had raised the problem of the shelter-deck. That was a difficult problem which must not be further complicated. Moreover, as the displacement system was very different from the system currently in use, a long

transitional period would have to be allowed, during which the authorities would have to operate two different systems side by side. It would be better to find a method which could be brought into operation as quickly as possible. Finally, the French proposal took no account of the shelter-deck concept. If the Conference decided to set up a new system of tonnage measurement, it must do it in such a way as to avoid creating new difficulties in the future. A solution must therefore be found which was not too far removed from the present system.

Mr. DE JONG (Netherlands) said that the shelter-deck question gave rise to many problems, and a solution must be found for it. He felt that whatever system was chosen, tonnage must not depend on the construction of the vessel and the number of decks. Tonnage represented no more than 7 to 23 per cent of the dues paid by vessels in ports.

Mr. PROHASKA (Denmark) shared the view of the United States representative in regard to the shelter-deck question. He also considered that tonnage should not depend on the 'tween-deck spaces, and it was clear that those spaces were not taken into account in the concept of displacement. A slight variation in port dues might represent a considerable loss for a shipowner.

In spite of what the representative of Norway had said, the displacement could be determined when the first plans for the ship were drawn up. It had been said that the concept of displacement would lead to figures different from the present ones. But from the figures which he had submitted the day before, it would be seen that the difference was insignificant.

Mr. GRUNER (Finland) said that it was important to choose a system which would suit not only existing ships but also ships to be constructed in the future. The Netherlands proposal merited consideration. The problems raised by smaller ships would have to be studied separately.

Mr. CUNNINGHAM (USA) stressed the need to find a compromise formula. In March 1963 the United States had agreed, in a spirit of compromise and in order to make progress towards a universal system, to abandon the concept of water ballast. Everybody must make concessions.

Mr. UGLAND (Norway) pointed out that delays occurred in ship construction because the position of the load line was not known. It would be possible to abandon the concept of the second deck by preserving the shelter-deck concept. The difference in costs as between closed and open shelter-decks might be as much as 10,000 dollars during a voyage of four to five months. For a shipowner with ten or a dozen ships that could represent a substantial sum.

Mr. MUENCH (Israel) said he had listened with interest to the arguments put forward by the various delegations and he was still convinced that displacement was the best parameter for calculating gross tonnage. It was a simple formula which solved most of the problems involved. The Committee would have to decide whether displacement should be certified or whether it could change frequently. A formula would have to be found which would take the interests of the owners and the port authorities into account. According to the formula submitted by Mr. Prohaska there was nothing to suggest that displacement would give figures very different from the present ones except in the case of passenger vessels. In order to meet that difficulty, he would propose a new formula.

The PRESIDENT stressed the need to find a compromise formula which would be approved by all.

Mr. MUENCH (Israel) suggested that gross tonnage could be calculated according to the formula:

$$GT = \frac{\Delta}{a} + P.b$$

$$\text{or } a + P.b$$

where Δ is the displacement

a is a general coefficient, which might be 2

P is the volume of passenger space

b is the coefficient proposed by Norway in Document TM/CONF/9/A ja.1

Mr. GUPTA (India) said he was pleased to note that all representatives had agreed that the shelter-deck problem must be solved, whatever parameters were chosen. The important thing, in his view, was to provide adequate safeguards to obviate any manipulations by owners. As far as India was concerned, displacement was the best parameter.

Mr. SOLDA (Italy) supported the Israeli proposal.

Mr. ROCQUEMONT (France) supported the formula proposed by Israel. In his view, it ought to meet the wishes of those delegations which had insisted that the parameter to replace gross tonnage should make allowance for vessels carrying light cargoes.

Mr. CUNNINGHAM (USA) said his delegation might perhaps be able to accept the Israeli formula, but it must first study the proposal. It would have to enter certain reservations, particularly in regard to shelter-decks and the complications which might result from a variable tonnage. It would also be

difficult to find a formula for defining the second deck. Moreover, the United States wished to keep the concept of the shelter-deck. The Israeli proposal might perhaps serve as a basis for a compromise.

Mr. SAGARA (Japan) said he could not support the Israeli formula. His delegation did not much like the concept of displacement and, in addition, a volumetric coefficient had been used for the passenger spaces.

Mr. MUENCH (Israel), replying to the remarks made by the United States representative, said that calculations carried out, in cubic metres, on a dozen ships of the convertible shelter-deck type, using the system based on half the displacement, had given variations of from 10 to 20 per cent on the tonnages obtained under the present system. More thorough studies, particularly if carried out with computers, would no doubt be useful, but it seemed likely that they would confirm the results already obtained. Since a compromise was essential, it would be advisable to accept a formula slightly less favourable to vessels of the shelter-deck type if that would make it possible to solve all the other difficulties and, in particular, to get round the problem of defining the second deck.

The objection raised by the Japanese delegation was a valid one, though not insurmountable. Perhaps the volumetric coefficient could be replaced by one which would assign a certain space to every berthed passenger.

Mr. NOZIGLIA (Argentina) pointed out that the Israeli formula was not consistent, because displacement was measured by weight and passenger space by volume. To overcome that difficulty, the formula might either be written as $a = \left[\frac{t}{m} 3 \right]$ or displacement volume might be used, thus giving a non-dimensional formula.

Mr. CHRISTIANSEN (Norway) said he did not favour a system based on displacement and he therefore associated himself with the criticisms made by the representative of Japan. He recalled that the system put forward by his delegation took account of the volume to the upper deck, ignoring the superstructures. That volume could be calculated in the early stages of the design of the vessel. The method based on total volume would give distinctly higher tonnages. As for the shelter-deck type of vessel, the problem of the second deck was indeed a difficult one; it might perhaps be solved by the use of the imaginary waterline advocated by the Soviet delegation. But the problem of where to put it would still have to be solved.

Mr. OVERGAAW (Netherlands) thought it was the duty of the Conference to adopt a simple, straightforward and equitable system. If it was not prepared to accept variations of around 20 to 30 per cent as compared with the results obtained under the existing system, it might as well give up the whole attempt. The Israeli proposal was however liable to penalize Dutch passenger ships. In view of the competition between sea and air transport, it was important to facilitate the task of shipowners.

Mr. PROHASKA (Denmark) regretted the fact that the Israeli proposal was expressed in cubic metres whereas tons were normally used. But in fact the tonnage obtained was based on the displacement volume of the ship. Thus weight and volume were not used jointly and the objections to the Israeli proposal were without foundation.

With regard to ships of the shelter-deck type, the speaker agreed with the comments of the United States representative. Although less favourable, the new proposal still left them some advantage. Calculations made on a few Danish ships confirmed deviations of between 10 and 20 per cent obtained in Israel. In regard to the comment by the representative of the Netherlands a comparison of proposed gross tonnages and existing gross tonnages carried out by the Danish delegation (TM/CONF/C.2/WP.1) was of interest. Whereas the coefficients calculated for six types of cargo ships were around 1.0, the values relating to passenger ships obtained by applying the Danish proposal were 0.49, 0.67 and 0.52 respectively. If they seemed unacceptable, a coefficient relating to passenger spaces or to the number of passengers could possibly be added to the formula, on a basis of 5 tons per passenger with berth and half a ton per passenger without berth. In any event, it would be sufficient to decide that Pb should represent the number of passengers and not the spaces allocated to them.

Mr. MURRAY-SMITH (UK) held the same views as the representatives of Denmark and the Netherlands. The Δ factor in the Israeli formula could represent volume rather than weight and should thus be acceptable to the Japanese delegation. One of the advantages of the system based on displacement was that it was suitable for dual-purpose ships. Too much importance should not be attached to the problem of shelter-deck ships, for in the case of new ships that problem no longer existed. The fears expressed by the Netherlands with regard to passenger ships were not unfounded, but those fears could perhaps be dispelled by the use of the coefficient which the Danish representative had suggested.

Mr. GUPTA (India) explained that there were a great number of Indian ships engaged primarily in unberthed passenger transport. He could therefore not take a decision on the Israeli proposal before it had been examined more thoroughly.

Mr. ROCQUEMONT (France) pointed out that passenger ships accounted for a mere 5 per cent of world shipping. Moreover, since they generally plied regular routes, there should be no difficulty in drawing up individual agreements. The choice between volume and mass was likewise only of secondary importance. For its part, his delegation would prefer the use of mass, for when a ship went from salt water to fresh water, the displacement volume was, in fact, altered whereas the mass remained unchanged.

Mr. SOLDA (Italy) observed that the introduction of a passenger coefficient into the formula penalized no-one; being a constant, it would enable shipowners to provide all the passenger space they wished.

The CHAIRMAN invited delegations to submit at the afternoon meeting any further compromise proposals they might wish to formulate.

The meeting rose at 12.35 p.m.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE THIRD MEETING
held at Church House, Westminster, London, S.W.1,
on Friday, 30 May 1969, at 2.35 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA (Japan)

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference (TM/CONF/WP.3)	3

Mr. CHRISTIANSEN (Norway) reiterated his delegation's suggestion put forward at the second meeting of the Technical Committee for a means of calculating the gross tonnage of a ship by calculating the volume of the whole body and multiplying by a conversion factor allowing for crew, navigation and similar spaces but omitting passenger spaces. For calculation purposes, an imaginary line could be taken at eighty-five per cent of the depth of the ship, instead of using a real constructed second deck as a load line. The underdeck tonnage for, say, an open shelterdecker could then be calculated and the conversion factor applied. To avoid confusion, the ship would have to be allowed a maximum draught and only one minimum draught, and would have to change its load line certificate and tonnage measurement certificate at the same time, within time limits to be settled by the Committee.

Mr. BONN (Canada) observed that while he did not doubt the feasibility of using displacement as a parameter for gross tonnage measurement, some ships could nevertheless have a number of tonnages to suit the density of the cargo. He did not believe that owners would hesitate to change the tonnage registration of their ships because of the complexity of the procedure: tonnage certificates could certainly be mailed to consulates in the major ports at short notice. There was a danger, however, that since the existence of two tonnage measurements was currently causing confusion, the possibility of increasing that number could only make matters worse.

Mr. SAGARA (Japan), in response to a request made by the French delegation, explained that his delegation did not agree with the use of the concept of displacement as a system of tonnage measurement because it believed that the gross tonnage was a system for indicating the size of a ship but not its earning capacity. Proposal C, however, did not embody the

concept of earning capacity. If the depth and size of a ship were introduced into measurement, some confusion would be caused, since displacement varied with the nature of the cargo and many ships were multi-purpose carriers.

Mr. ROCQUEMONT (France), in reply, firstly to Mr. SAGARA (Japan) said that while a ship could certainly have several displacements, it was obviously in the interests of the shipowner to use it at the highest value authorized. He pointed out that an open shelterdeck ship with a relatively light cargo could have a permanently low draught, envisaged in its final design. The classification societies use tables to compute the scantlings, the structural characteristics of the principal parts of the ship and would not want that system to be changed. He considered, therefore, that it was no use determining the draught if the ship could, on the basis of its structure and assigned load line, have a higher draught. His delegation took displacement to correspond to the load line allocated to the ship and considered that the load line could possibly be placed at a lower level than that laid down in the 1966 Convention.

On the question of deadlines and the time to elapse between issuance of the two certificates, the delegation believed that that could be less than six months with the provision, of course, that a ship should not change its displacement registration between successive stages of a single voyage. It had been said that if a ship had a low displacement, certain port authorities would believe it had a theoretically higher one, which should be used. He felt, however, that if the ship were adequately designed its displacement would be a maximum, because if the maximum freeboard were not determined from geometrical considerations, the minimum freeboard would anyway have to meet the requirements of the classification societies.

His delegation could not agree with the Canadian suggestion that there should be two displacements, a high and a low. A ship making several successive voyages with the same displacement could be adequately classified by that value; it should thus be possible for each ship to have a single displacement and a single certificate stating it, with strict rules applied to ensure that the tonnages were changed as infrequently as possible.

Mr. UGLAND (Norway) protested that shipowners did not necessarily use their ships to full draught; open shelter-deckers, for instance, needed to run with very little draught with a very light cargo. He did not agree with the French proposal to change the tonnage very infrequently since that would do away with the shelterdeck principle which it had been agreed to keep. He pointed out, furthermore, that if a ship had many different tonnage certificates it would be a very difficult situation for the port authorities.

Mr. MUENCH (Israel), in reply to the point made by Mr. SAGARA (Japan) on the earning capacity of a ship, said that Proposal C intended to provide a parameter on which gross tonnage could be based and could not therefore lead to any confusion. The formula put forward by his delegation was aimed at giving a figure fairly close to the gross tonnage, but close also to the displacement for most ships; displacement would thus play the role currently occupied by gross tonnage.

Furthermore, he wondered how, if gross tonnage was to represent the size of the ship, that size could vary with the deadweight; it would seem that an element of earning capacity was being re-introduced into the displacement measurement.

In conclusion, he observed that the Proposal made by Mr. Christiansen (Norway) to calculate one of the two values to the waterline, was exactly in accordance with the wishes of the Israel delegation.

Mr. de JONG (Netherlands) said that his delegation could accept the formula put forward by the Israeli delegation as a basis for discussion but considered that the displacement value to be used should be the actual displacement of the ship, in most cases the maximum displacement in accordance with the freeboard. So far it had not been made clear which of the two displacement values - for close or open shelter-deck conditions - was to be used.

He also believed that owners should not be able to change their ship's tonnage frequently; a limitation of one year would be sufficient.

Professor PROHASKA (Denmark), replying to the delegation of the Netherlands on the definition of delta (Δ) in the formula, explained that in a closed shelter-deck condition the displacement of the load line mark should correspond to that position, and that of the ship in an open condition should correspond to the freeboard measured from the second deck.

On the subject of the possibility of changing the tonnage, he pointed out that it would render impossible the open/closed shelter-deck system, the advantages of which had already been

agreed upon. Owners should be allowed to change the freeboard mark and could be relied upon not to do so too frequently so there seemed no need to impose limitations; the system could be left as it was.

Mr. ROCQUEMONT (France), on the matter of convertible shelter-deckers, suggested that either, if a displacement parameter were chosen, there could be two displacement values depending on the load condition of the ship, i.e. the ship could have a high displacement on the outward journey and a low one on its return. He wished to keep the open shelter-decker concept, with the possibility of conversion as well, whether a volume or a weight parameter were finally adopted, but believed that the port authorities did not want many changes of the tonnage value, nor too flexible a tonnage measurement system.

Mr. JONG (Netherlands) said that the Committee should be careful not to adapt a convention which would not be acceptable to the ports and other interested parties. He invited delegates also to study during the weekend the Netherlands formula on page 38 of TM/CONF/3 and to make comparative calculations.

Net Tonnage

Mr. CUNNINGHAM (United States of America) maintained that a simple formula for approximating net tonnage should equate it to the gross tonnage minus the water ballast space, all multiplied by a coefficient not less than a certain percentage (for example 25 to 35 per cent) of the gross tonnage, so that in no case could the net tonnage arrive at a zero or near zero value.

The CHAIRMAN considered that the proposal put forward by Mr. Cunningham (USA) could be expressed in the following formulae:

$$\text{Net} = K\left(\frac{\Delta}{a} + \text{Pb} - V\right)$$

$$\text{Net} \geq K\left(\frac{\Delta}{a} + \text{Pb}\right)$$

where K stands for the coefficient and V for the water ballast spaces.

Mr. CHRISTIANSEN (Norway) considered that once cargo spaces had been defined in some way, the volumes of the cargo spaces should be measured and bona fide water ballast spaces not included. Referring to the Norwegian proposal that all cargo spaces above the uppermost deck should in all cases be exempted, he explained that it was intended that real cargo spaces would be included in the gross tonnage for closed shelter-deck ships and exempted for open ones. He agreed that some provision should be made to ensure that the net tonnage was not less than a certain percentage of the gross tonnage but stipulated that the latter should be in volumetric units to avoid confusion in existing ships.

Professor PROHASKA (Denmark) commented that since most delegations seemed to prefer that both gross and net tonnage measurements be kept, some modification of the United States proposal could be acceptable. Firstly, he believed that the passenger space term should be the same in both gross and net tonnage and, secondly, it was not correct simply to deduct the water ballast term. The Committee had to aim at obtaining net tonnage figures in the neighbourhood of existing ones; he suggested that the displacement and passenger term multiplied by a coefficient of around 0.2 to 0.25 would give a simple figure of the right value.

Mr. GRUNER (Finland) observed that his delegation proposed use of the deadweight instead of the net tonnage as a basis for calculating dues and drew attention to the tables on the last page of TM/CONF/3/Add.5. The deadweight corresponded very closely to existing net tonnages for cargo ships if multiplied by a factor of 0.375.

Mr. MURRAY SMITH (United Kingdom) observed that since there was no great value in subtracting water ballast spaces, so that the net tonnage would be simply a percentage of the gross, there seemed no relevance in keeping the concept of net tonnage at all.

Mr. CUNNINGHAM (USA) maintained that if the formula selected was to apply to cargo ships, there was need to introduce some factor to cover water ballast space.

As to the suggestion that only one tonnage, the gross tonnage, be provided, he feared that such a development would entail upward adjustment of port dues by every port in the world. He accordingly considered that the two tonnages should be maintained.

Mr. ROCQUEMONT (France) said that on the question of water ballast factor, he associated himself fully with the stand taken by Denmark and the United Kingdom. To introduce water ballast into the tonnage measurement formula would complicate matters and open the way to fraudulent practices, unless detailed requirements for manhole diameter, etc. were laid down.

Secondly, he agreed fully with the United Kingdom on the question of a second parameter. If, as he hoped, the Committee decided to accept the compromise formula suggested by Israel for the measurement of gross tonnage, the Convention could be confined to that parameter. As to the fear expressed by the United States regarding rises in port dues, he himself thought that port authorities would probably thank the Conference for taking that line; i.e. laying down a single parameter on which to levy dues on ships.

Mr. MURRAY SMITH (United Kingdom) said he had been going to reply to the United States in much the same terms as France. He would take the opportunity to make it clear that the United Kingdom was not necessarily fully in agreement with the compromise proposal on gross tonnage measurement which was to be considered over the weekend.

He drew attention to a paper submitted by the United Kingdom (TM/CONF/C.2/WP.2); its purpose was purely to help delegations lacking computer facilities in their consideration of the compromise proposal, by indicating in graphic form the relationship between the Danish amendment to Proposal C and existing gross tonnages in respect of some 150 ships.

Mr. PRIVALON (USSR) said that the second parameter, net tonnage, was the basis in many countries for determining port dues, which in turn had a bearing on the earning capacity of ships. Therefore, his delegation could not accept displacement as a basis for the parameter in that it had no linear dependence. In the past, calculations had been made in his country with a view to determining whether there existed a function close to a linear function between displacement and net tonnage and had found quite considerable variation between the two (of the order of 0.16-0.36). If it was now desired to adopt a parameter of the kind as a basis of fair distribution of earnings for all types of ship, certain substantial adjustments should be made.

He would take the opportunity to refer to the question of gross tonnage. The use of displacement as the basic parameter involved features that would penalize shipowners planning to improve safety of navigation from the technical standpoint. He cited, as an example, the strengthening of a ship against ice

conditions. Such strengthening was of great importance from the safety standpoint for ships habitually plying in icy waters; and the proposed new net tonnage formula would undoubtedly militate against such action, thus reducing safety at sea. Secondly, navigation was becoming faster and faster and all would recognize that high speed also entailed more mechanical equipment of a costly type, adding to deadweight. Nuclear powered ships would also be penalized because of the weight of the collision protection required. With advances in shipping, the world was looking forward to the time when the use of liquid fuel in ships would be completely dispensed with and unclean fuel would be used. Lastly, it was difficult to visualize displacement as the basis for calculating net tonnage in the case of certain new types of ship that were now coming into use. His delegation would accordingly prefer the slightly more complex proposal set out in TM/CONF/9/Add.1.

Professor PROHASKA (Denmark) disagreed with the Soviet view that the use of displacement in calculating the gross tonnage would penalize ice-strengthened ships. Strengthening of the kind was covered by national regulations and the matter of importance for the shipowner was the first cost of the additional strengthening and not any modest increase in tonnage that might result. Again, he would take issue on the question of nuclear-powered ships, for the weight of the heavy shielding for the atomic reactor was not high as compared with the weight of fuel oil i.e. conventional ships.

The essential was to arrive at a simple formula that would provide tonnage figures not too far away from the present figures and displacement would, in his opinion, be the best parameter for that purpose.

Mr. UGLAND (Norway) endorsed the comments made by the Soviet Union. The important aspects to which he had drawn attention should be given due consideration.

The discussion showed that there was need to clear up some matters of principle. He had understood that there had been more or less general agreement in Plenary on the inclusion of two parameters, gross tonnage and net tonnage. His delegation took the view that the two parameters should be derived from different sources; i.e. if gross tonnage was to be measured on the basis of displacement, the net tonnage should be calculated on cargo space volume.

Lastly, there was need to lay down in principle that anything done to improve the safety of a ship should not add extra expense for the shipowner.

Mr. ROCQUEMONT (France) pointed out that for a long time past shipowners had been concerned to keep their ships as light in weight as possible, because weight was costly to displace. It was an immutable physical law that propulsion power was a growing function of speed and weight of ship; and everyone was aware that each useless ton was costly throughout the whole lifetime of a ship, the more so as it meant higher port dues. But many other instances might validly be cited where weight had to be added to a ship for special purposes, as, for instance, the case of ships operating in tropical waters which had to have greater ventilation facilities or air-conditioning plant.

Mr. WILSON (United Kingdom) thought there was need for the Committee to keep its feet firmly on the ground. An owner built a ship for a specific purpose, a particular trade or function.

If the trade happened to be in northern European waters, the ship, to be operated, had to have ice strengthening; and if in tropical waters, air-conditioning. Those facilities were not added specifically for safety purposes but merely to enable the ship to operate in those waters. Safety was taken care of by government regulations and international conventions so that the owner had no choice in regard to the installation of safety precautions. The same applied to crew accommodation but in general a higher standard had to be maintained in order to obtain crews.

All those matters were essential so that it was a false precept to speak of "penalizing" the shipowner. A nuclear-powered ship was not penalized in displacement or deadweight because the extra shielding was offset by not having to carry oil fuel. Moreover, the accommodation on a luxury liner was not provided simply to give the greatest comfort but to attract custom, enabling a profit to be made on operation.

Mr. GRUNER (Finland) pointed out that the Finnish shipowner had no choice in the matter of ice-strengthening, as, without it, ships would have to be laid-up for three to five months each winter. Nor was the object of such strengthening simply to be able to operate at a profit: it was necessary to keep the country going. It was true that ships operating in tropical waters required air-conditioning installations. In that connexion, he would point out that one Finnish shipping line operated between Finland and South America and accordingly required both air-conditioning and ice-strengthening.

Mr. CHRISTIANSEN (Norway) pointed out to the representative of Denmark that insurance premiums in shipping were based on the statistics of the complete fleet, and had nothing to do with strengthening or otherwise. Finnish ships plying to other parts

of Europe or to the United States had to pay higher duties than shipping lines starting in more clement waters. It was true that nuclear-powered ships were saved the weight of oil fuel but they had to have many other weight-adding items peculiar to such ships alone.

Those considerations were, however, irrelevant. The point at issue was whether an owner should be penalized for increasing safety precautions and his delegation was emphatically against such a contingency.

The United Kingdom representative had spoken of ships being designed for a special purpose. Norwegian shipping had to be ready to trade anywhere in the world. Indeed, special design was the exception rather than the rule.

In many cases, shipowners included safety precautions going beyond the minimum requirements laid down; his point was that they should not be penalized for so doing.

Professor PROHASKA (Denmark) said that the shipowner's concern was obviously to have a ship that would be profitable on the trade route for which it was to be used. He might even, if necessary, require ice strengthening in excess of regulations of the classification societies. Increase in tonnage was a relatively minor matter, amounting only to about 1 per cent of the initial outlay on a ship. The Committee should concentrate on a simple formula and avoid discussion on minor details.

Mr. PRIVALON (USSR) said that there was no point in discussing ice strengthening or air conditioning, or their respective implications, though in his opinion they would penalise shipowners. It was the principle that was important.

Mr. GRUNER (Finland) said that ice strengthening was very important for ships using Finnish harbours in winter. Ships without ice-strengthening paid higher fees per net registered ton. Ships built to Finnish ice standards paid no dues; but a ship - whatever its class - that was not capable of going through ice would have to be towed by an ice-breaker at very high fees. In his opinion the displacement rule was not satisfactory; the deadweight rule would be simpler and easier.

Dr. MUELNCH (Israel) said that over the years the tonnage rules had come to embody provisions concerning crew comfort, safety of ships and prevention of oil pollution, which should really be provided for in other regulations or instruments. The existing tonnage regulations were liable to have adverse effects on naval architecture because they contained too many definitions.

The CHAIRMAN asked if he was correct in understanding that the USSR was in favour of the Norwegian proposal in TM/CONF/9/Add.1 as far as net tonnage was concerned.

Mr. PRIVALON (USSR) concurred. He also said that his delegation saw no linear connexion between the Norwegian proposal and earlier proposals.

The CHAIRMAN, summing up, said that there were four main trends in the discussion: net tonnage as a function of displacement; net tonnage as a function of displacement with correction for water ballast and a limitation of minimum net tonnage; net tonnage as a function of volume; Mr. Gruner added net tonnage should be a function of deadweight.

Dr. MULNCH (Israel) asked the Norwegian delegate what effect would have the addition of cargo volume above the deck on the tonnage deck.

The CHAIRMAN asked also the Norwegian delegate with respect to the sketch on the blackboard whether for open and closed shelter-deckers the same figures would apply.

Mr. CHRISTIANSEN (Norway), replying to questions by Dr. Muench (Israel) and the CHAIRMAN, said that according to his proposal the cargo space above the uppermost deck would be exempted in all cases, for open and closed shelter-deckers, as a result of the provisions of Assembly Resolution A48 (III). According to the suggestion in his sketch, whereby the cargo space below the imaginary line would be net tonnage and passenger space would be added, it might be necessary to define cargo space. He did not mean that the open deck was cargo space: he had never envisaged deck cargo as cargo for the purposes of net tonnage.

The CHAIRMAN said he understood that in closed conditions, to avoid the problem of an additional deck for tonnage purposes, the net tonnage would be the total volume of cargo plus the volume for passengers. In open deck conditions the net tonnage would comprise all cargo space below a line corresponding to 85 per cent of the depth, plus passenger space.

Mr. CHRISTIANSEN (Norway) concurred.

Mr. PRIVALON (USSR), in reply to a question by the CHAIRMAN, said that the Norwegian representative's explanation would provide a good basis for discussion of net tonnage because it took shelter-deck ships into account.

Mr. WILSON (UK) asked whether the imaginary line of 85 per cent depth in the Norwegian proposal could apply to a ship whether or not it had a second deck: in other words, to a tanker.

Mr. CHRISTIANSEN (Norway) replied in the affirmative, although he doubted whether it would pay tankers to use the imaginary line. He would prefer to retain the old shelter-deck idea.

Mr. CUNNINGHAM (USA) said he assumed that if the second deck were eliminated there would still be load line control as proposed in TM/CONF/9/Add.1. As regards what the United Kingdom representative said he doubted if it would be used by tankers because they would have to lose an unnecessary amount of deadweight.

Mr. BELL (UK) understood load lines were being assigned from an imaginary deck line; but under the Load Line Convention there had to be a deck.

The CHAIRMAN said that as he understood it, the load line mark should be at or below the imaginary line for the purpose of calculating net tonnage. The provisions of the Load Line Convention should not preclude the imaginary line.

Mr. CHRISTIANSEN (Norway), in reply to questions by the CHAIRMAN, Professor PROHASKA (Denmark), Dr. MUENCH (Israel) and Mr. CUNNINGHAM (USA), said that he had not invented the imaginary line. He had suggested it to overcome the difficulty over the second deck. His proposal reverted to the operation of shelter-deckers before the existence of the International Tonnage Mark Scheme; it applied to open and closed shelter deck ships. He would endeavour to prepare a further paper, although the information was all contained in TM/CONF/9/Add.1.

The meeting rose at 6.10 p.m.

8

8



2 June 1969

Original: ENGLISH

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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE FOURTH MEETING

held at Church House, Westminster, London, S.W.1,
on Monday, 2 June 1969, at 9.45 a.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference (TM/CONF/WP.3; TM/CONF/6, Corr.1 and Add.1; TM/CONF/9/Add.1; TM/CONF/C.2/WP.5 and Corr.1 and WP.6 (continued))	3

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED BY THE
CONFERENCE (TM/CONF/WP.3; TM/CONF/6, Corr.1
AND Add.1; TM/CONF/9/Add.1; TM/CONF/C.2/WP.5
AND Corr.1 AND WP.6) (continued)

The CHAIRMAN suggested that representatives should confine themselves to new points arising out of reflection on the previous meeting's discussion and should not repeat arguments already advanced. He invited attention to two new Notes submitted by Norway on the determination of tonnage for open and closed shelterdeck ships independent of a definition of a second deck (TM/CONF/C.2/WP.5 and WP.6).

Mr. CHRISTIANSEN (Norway) introduced the two documents which were concerned with the net tonnage and the gross tonnage concepts respectively. He drew attention to a correction to document TM/CONF/C.2/WP.5: the end of the second line of the opening paragraph should read: "... document TM/CONF/9/Add.1 is".

The CHAIRMAN, in reply to a question from Mr. PRIVALON (USSR), said that he had had in mind that the Committee should first hear from any members who might have additional information on the gross tonnage or net tonnage concepts. He would then try to ascertain, by an informal show of hands, whether there was a majority in favour of two figures or of one figure being inserted on the ship's certificate; or of a system permitting a reduction in gross and net tonnage for both old and new ships, when the draught was reduced to a certain limit, or in accordance with actual draught. If it was found that the Committee was in favour of continuing the shelterdeck practice for new ships, the next point to consider would be whether it would be necessary actually to build a deck or not. After the preliminary discussion and the informal decision, the Committee could go into the question more deeply and see if it could

reach agreement on which tonnage parameters to recommend to the plenary meeting as being most likely to gain support.

Mr. GRUNER (Finland) proposed that the Committee should discuss his proposal for deadweight as a parameter, in which case he would like to introduce it.

Mr. ULLMAN (Sweden), expressing the views particularly of port authorities, said that the Committee might be moving in the wrong direction. He recalled a statement made in the report of the Sixth Biennial Conference of the International Association of Ports and Harbors (IAPH) in Melbourne in March 1969 and repeated by the representative of the Panama Canal Company, to the effect that the tonnage measurement system was supposed to serve two purposes. The first, and most important, was size limits in safety, manning and similar provisions. The second was to form a basis for shipping dues including towing, piloting and other charges. The first purpose seemed to be causing some difficulty to members of the Committee. Dues and charges varied according to many different factors; but many of the proposals submitted seemed designed to favour a special type or special types and sizes of ship.

As to the opinion of the Swedish port authorities - which was shared by many other dues-collecting organizations - he said that any dues-collecting authority would reply in the same way as the Panama Canal Company representative who had said that the Company would decide its action on a new tonnage measurement system when it knew what that system was. Port authorities all over the world were waiting for the new system and hoping that the Conference would produce a really useful one. It was essential for the Conference to bear in mind that the new system would be useful only if it provided reasonably accurate information on

the magnitude of ships of various types and sizes: a system which permitted exemptions or deductions would not be useful. Experience with the tonnage mark had made port authorities more knowledgeable about tonnage measurement and aware of such matters as exempted cargo space. If the result of the Conference was a system with a variety of exemptions and deductions - concealed or otherwise - its work would have been in vain, for port authorities would not use the system.

The purpose of a universal tonnage measurement system was not to favour special groups of ships. If such favouring had any economic justification it would be provided for by competition between ports.

Mr. WILLIAMS (Australia), endorsing the views of the Swedish representative, said that the Australian port authorities had supported the resolution adopted at Melbourne by the International Association of Ports and Harbors (TM/CONF/12). Prior to the Conference they had expressed the wish for a single figure only for tonnage dues, to represent the true size of the ship, especially as regards services to be used and paid for by the shipowner. They had also said that they were not prepared to accept a system with exempt spaces and imaginary decks: although all but two of the Australian States used tonnage mark figures as they were intended to be used, they could not guarantee to do so in the future. He suggested that the Committee should agree to a single figure - which could be gross - to represent the relative sizes of ships; the port authorities had said that if the Conference decided on one figure they would adjust dues accordingly. He did not think that they would necessarily raise their rates - as feared by the United States representative:

that would depend on the relationship between new and old figures. He doubted the practical value of a second figure - the "net" figure - since it depended on exemptions and imaginary lines.

Mr. NOZIGLIA (Argentina) said that if two parameters - gross tonnage and net tonnage measurement - were used, they could not both vary according to freeboard: the size of shelterdeck spaces would have to be measured accurately. Moreover, from the financial, economic and operational point of view, there would be a discrepancy if both varied according to freeboard. With a variable parameter, it would be difficult to ascertain the size of ships which did not depend on freeboard.

If there were to be two parameters, one could be variable, but the gross tonnage should be fixed.

Mr. ROCQUEMONT (France) shared the concern of the previous speaker. At the previous meeting it had seemed that some representatives hoped that a ship could have a strong and a weak value in the same parameter to replace net tonnage and gross tonnage. Some representatives wanted the ship to have two measurement values: peak and lowest. The IAPH resolution was a serious warning on what would happen if ships reached ports with varying values. The port authorities would notice variations in the tonnage of the same ship; they would accuse the Conference of covertly reviving the International Tonnage Mark scheme and would want to recognize only the highest value. Those representatives did not say clearly if they wanted international regulations concerning safety and crew conditions to be applied. If they wanted a change in the ship's tonnage value, they were acting dangerously in advocating a high and a low figure.

The French delegation had always maintained that a ship's tonnage should be as constant as possible. Under the present suggestion a ship might change its character frequently or even overnight.

Mr. MURRAY SMITH (UK) said that he strongly agreed with the previous speakers. After carefully considering the proposals made at the previous meeting, his delegation had come to the conclusion that the Committee was in difficulty because it was trying to perpetuate the concept of open shelterdeck space. In discussions prior to the Conference, his delegation had had to bear in mind the view of certain national interests that there was some validity in retaining the open shelterdeck space concept. After taking into account all the relevant considerations, the United Kingdom shipowners generally had decided that there was no point, in respect of new ships, in retaining the shelterdeck exempted space concept, although for existing ships it would have to be retained for a period.

Another member of his delegation would speak, on behalf of the shipowners, on the need or otherwise to retain the shelterdeck concept.

Mr. BOLTON (UK) said that the shipowners considered that the position of existing ships must be maintained for a reasonable period. The tonnage of new ships was another matter: the shipowners must know the Conference's decisions before building new ships. It was essential, therefore, to see that the position of existing ships was preserved and a reasonable time given for them to run out their life; and to obtain a new, reasonable and logical system - which meant measuring the size of the ship and not pretending that certain spaces existed. All ships should be measured alike throughout the world: then it would not matter what the measurement was because all would compete fairly. The Conference would have failed if it ended

without producing a system based on measuring the size of the ship.

Mr. CUNNINGHAM (USA) said that his delegation's concern from the outset had been to protect the United States shipping economies. It considered that there should be gross and net tonnages, which should be as close as possible, and that any attempt to change to one number - whether it were higher or lower - would cause upheaval and disruption. He did not agree with the Australian representative that a single figure would not necessarily result in higher port charges. A lower figure would give the ports smaller numerical basis and rates would have to be raised; a higher figure would give them an advantage but they were most unlikely to reduce their rates. The International Tonnage Mark system was much more stable.

The US delegation considered that a tonnage system was needed, and as soon as possible, which meant a system with two numbers. Gross and net tonnage should be as close as possible. It recognized that some change was inevitable but it need not be overwhelming.

Mr. PRIVALON (USSR) said that his delegation had given objective consideration to the proposals made at the previous meeting. The proposal by the Israel representative gave less satisfactory results than Proposal C, perhaps because there was no linear relationship between gross tonnage measurement and displacement. None of the proposals offered a real solution or a real tonnage. He wondered why the Committee was considering new proposals when the Plenary Meeting had not asked it to do so. The proposals circulated before the Conference offered better possibilities.

His delegation had also considered the displacement parameter but felt that it was unsatisfactory because of the inconsistent value of displacement.

According to document TM/CONF/10, port dues were levied on the basis of net tonnage which had been, and should continue to be, the carrying capacity feature. Hence, there should be a parameter connected with cargo and passenger spaces rather than an abstract notion of spaces. But it would not be logical to speak of net tonnage used for other purposes. Perhaps a third parameter was needed.

It was a wise idea to consider the advice of the canal and port authorities. The International Association of Ports and Harbors had asked for a scheme not based on draught but on constant parameters found in a ship's register. Consideration of displacement as a parameter went counter to the wishes of the IAPH. The displacement parameter was no new idea: it had been tried for the first time in 1891 and suggested again in 1911, 1913, 1931 and at other times. If it was such a simple idea as some seemed to think, why had it not been adopted? Perhaps it conflicted with safety requirements at sea and the improvement of seamen's living conditions.

He recalled that Mr. Rocquemont in his paper "Where matters stand on the Eve of the International Conference on Tonnage Measurement" expressed the opinion that the ports themselves would develop a second coefficient for size of ships. The tonnage parameter should, in any case, be real and concrete rather than abstract; his delegation, for one, firmly advocated the use of volume measurement.

He went on to point out that although the Technical Committee had received a very clear and comprehensive mandate (TM/CONF/WP.3)

to discuss Proposal C (TM/CONF/6) and the Norwegian Proposal (TM/CONF/9/Add.1) it had nevertheless spent much time considering other possibilities and had so far failed to find a compromise solution incorporating the most important aspects of the two basic proposals.

Mr. CHRISTIANSEN (Norway) stated that in order to avoid confusion in the ports his delegation firmly believed that two figures, namely gross and net tonnage, should be featured in the tonnage certificate, that those values on the new system should be close to the existing ones and be brought into force as soon as possible. He also considered that tonnage was a measurement of volume and that it was immaterial which parameter was used to arrive at the volume value so long as it gave a number, such as the size of the ship, to be used for safety purposes, manning, etc. Furthermore, as the Soviet Union delegation had pointed out, a second parameter was needed to indicate the carriage capacity of the ship, the two parameters being strictly independent of each other. On the subject of the history of the displacement concept referred to by the Soviet delegation, he recalled that in the hearings before the Sub-Committee on Panama Canal of the Committee on Merchant Marine and Fisheries (US House of Representatives, Ninetieth Congress, 1967) it had been concluded that displacement could not be used as a measure of ship size.

Professor PROHASKA (Denmark) said he understood that the Committee at its third meeting had reached agreement on a formula for gross tonnage containing one term proportional to the displacement and one depending on passenger space or on passenger number; his delegation believed that a second term was indeed necessary but that it was premature to state exactly what that should be.

He observed that the USSR representative had mistakenly cited the Danish delegation as believing that displacement could not be used as a criterion; on the contrary, his delegation had always advocated it as the preferred parameter. Contrary to criticisms which had been levelled at it, displacement had the advantage of being the first and the simplest parameter to be determined in the design of a ship and, according to the Danish definition given in TM/CONF/7, the displacement measured to the summer load line as defined by the 1966 Load Line Convention, it was a fixed value which did not vary from day to day for any one ship. Furthermore, there was no basis for the belief that the displacement parameter gave any incentive to shipowners to provide insufficient living space for seamen.

Under the 1966 Convention a ship could have two different displacements according to the load line mark; the British shipowners had deemed it unnecessary to extend that scheme to new ships whereas other owners, especially those operating ships on long voyages with very heavy cargoes on outward journeys and light ones on return, had disagreed. It seemed perfectly feasible however, to incorporate the dual value system into the new Convention. He cautioned that although the representatives of the ports authorities had definitely called for abolition of the tonnage mark scheme they could not be construed as having requested a single tonnage only; he believed that once the tonnage mark had been replaced by a satisfactory system they would find no further fault with the shelterdeck concept.

Mr. MURRAY SMITH (UK), supported by Mr. KING (Kuwait), referring to the USSR statement, observed that although, strictly speaking, consideration of proposals by the Technical Committee other than those in TM/CONF/6 and TM/CONF/9/Add. 1 might be procedurally out of order, in his view it might nevertheless be allowed to consider other parameters. Examinations made by the United Kingdom delegation on the formulae proposed on 30 May indicated that none of the proposed formulae could be considered satisfactory.

Referring to the United States statement to the effect that adopting a gross volumetric measurement would considerably raise all gross tonnages, he noted that that was only the case for "bastard" ships; i.e. shelterdeckers with "unrecognized" spaces on board. As for the United States delegation's belief that the dues-collecting authorities would not find that acceptable, he was convinced that, on the contrary, they favoured a simple system of levies and recognized the advantages of having a single parameter.

Mr. de JONG (Netherlands) supported the views of the United Kingdom shipowners; his delegation had maintained in the Sub-Committee for some ten years that it did not matter whether the figures reached under a new Convention should approach the existing ones so long as a reasonable transitional period was provided and measures were adopted to ensure fair competition between ships operating on the old and new systems during that time. The Netherlands delegation had originally thought in terms of 20 to 25 years, but had come to believe that 10 to 13 years would be adequate.

It was also convinced that one parameter would suffice and favoured displacement on minimum freeboard, according to the strength of the ship. Shipowners building their ships entirely as open shelter-deckers would have a low tonnage; those designing a ship for a larger draught, entailing a considerable amount of steel in the construction at a more elevated cost, would have to be prepared to pay higher dues throughout the life of the ship.

Mr. ROCQUEMONT (France) disagreed with the assertions made by the Soviet delegation, firstly, that the Melbourne Resolution condemned the use of displacement as a parameter and, secondly, that the solution for a formula for gross tonnage measurement considered by the Committee at its third meeting was not a good compromise on two very different original proposals. His delegation felt, on the contrary, that the new tentative formula met the wishes of the Norwegian delegation in so far as the parameter replacing gross tonnage could be lower when a ship had a lighter cargo and yet also satisfied some features of Proposal C in respect of the weight of the ship.

Mr. CHRISTIANSEN (Norway) stated his delegation's view that the shelter-deck concept should be maintained for existing ships and extended to new ones, at least for the near future, in the interests of uniformity in the transitional stage from the old Convention to the new.

The CHAIRMAN suggested that the Committee should proceed to voting on various general matters, in order to elicit tentative conclusions prior to coming to final decisions at the afternoon meeting.

The SECRETARY explained that, although the Credentials Committee had not as yet completed its work, the Legal Officer informed him that the Committee was empowered to vote under rule 5 of the Conference's rules of procedure. Decisions in the Committee would be taken by a simple majority, as opposed to the two-thirds majority required in Plenary in respect of matters of importance.

The CHAIRMAN put to the vote the question: whether the open shelter-deck concept should be retained for existing ships.

There were 31 votes in favour of retention and 1 against.

The CHAIRMAN put to the vote the question: whether the open shelter-deck concept should be applied to new ships.

There were 16 votes in favour of application and 13 against.

In response to points made by Mr. ROCQUEMONT (France) and Mr. GUPTA (India), the CHAIRMAN put to the vote the question: whether conversion from open to closed shelter conditions and vice versa should be allowed at infrequent or frequent intervals

There were 18 votes in favour of infrequent changes and 7 in favour of frequent changes.

The CHAIRMAN put to the vote the question: whether tonnage should embody two figures or one figure.

There were 26 votes in favour of two figures and 7 votes in favour on one figure only.

The CHAIRMAN proposed to put to the vote the various parameters that might be used for calculation of gross tonnage, as represented by the following formulae:

- | | | |
|----|---------------------|----------------------------------|
| 1. | $GT = f(DWT)$ | DWT = Deadweight in tons |
| 2. | $GT = f(V)$ | V = Volume in m^3 |
| 3. | $GT = f(\nabla)$ | ∇ = Displacement in m^3 |
| 4. | $GT = f(\nabla, V)$ | |

In response to a point made by Professor PROHASKA (Denmark), he added a fifth possibility:

$$5. \quad GT = f(V, P) \quad P = \text{Passenger space volume} \\ \text{or passenger number}$$

Professor PROHASKA (Denmark) said his delegation would much prefer formulae 4 and 5 to be combined in a single equation but the point was one for later discussion in the light of the voting on the first three.

In answer to points raised by Mr. CUNNINGHAM (USA), Mr. SOLDA (Italy) and Mr. ROCQUEMONT (France), the CHAIRMAN explained that V, as used in the formulae, represented the total volume of the ship's enclosed spaces. Questions concerning passenger space or water ballast space would come up for later consideration.

Multiple voting, i.e. affirmative votes for two or more of the formulae, would be immaterial, since the basic idea was to determine which solution enjoyed the greatest support.

Mr. PRIVALON (USSR) suggested that confusion would be avoided by restricting the voting in the first instance to the basic questions of principle exemplified by the formulae 1, 2 and 3. The various functional details could be taken up later in the light of the basic decision.

Mr. GUPTA (India), Mr. MURRAY SMITH (UK), Mr. ERICSSON (Sweden) and Mr. LUENGE (Israel) supported the Soviet proposal, Mr. MURRAY SMITH adding that each delegation should have one affirmative vote only on the three items.

The CHAIRMAN confirmed, in answer to Mr. SOLDA (Italy), that the formulae 1, 2 and 3 related to ships both with and without passenger accommodation.

Professor PROHASKA (Denmark) said he would endorse the Soviet proposal on the understanding that, if selected, formula 2 or formula 3 could be amplified to take account of passenger space or number.

The CHAIRMAN noted that the Soviet proposal was generally acceptable on that condition.

There were 2 votes in favour of deadweight (formula 1); 23 votes in favour of volume (formula 2) and 10 votes in favour of displacement (formula 3).

The CHAIRMAN suggested that the Committee proceed to voting on the general parameters for the calculation of net tonnage (deadweight, volume or displacement), before taking up the formulae 4 and 5.

By 13 votes to 4, it was so decided.

Mr. ROCQUEMONT (France) said his delegation would vote in favour of displacement; but displacement was not the only parameter to be taken into account for determination of net tonnage.

Mr. de JONG (Netherlands) pointed out that the possibility set out in Proposal C should also be voted on.

Mr. GRUNER (Finland) thought that, before proceeding to the voting, some clarification should be given as to the formulae that would result from using volume or displacement as the parameter. The implications of using deadweight were perfectly plain to all parties concerned, but the same was not true of the other two basic parameters. The Port Authorities were not subject to directives from outside; it would therefore be wise to provide a reliable figure that was generally acceptable, for their use as a basis for the levying of dues.

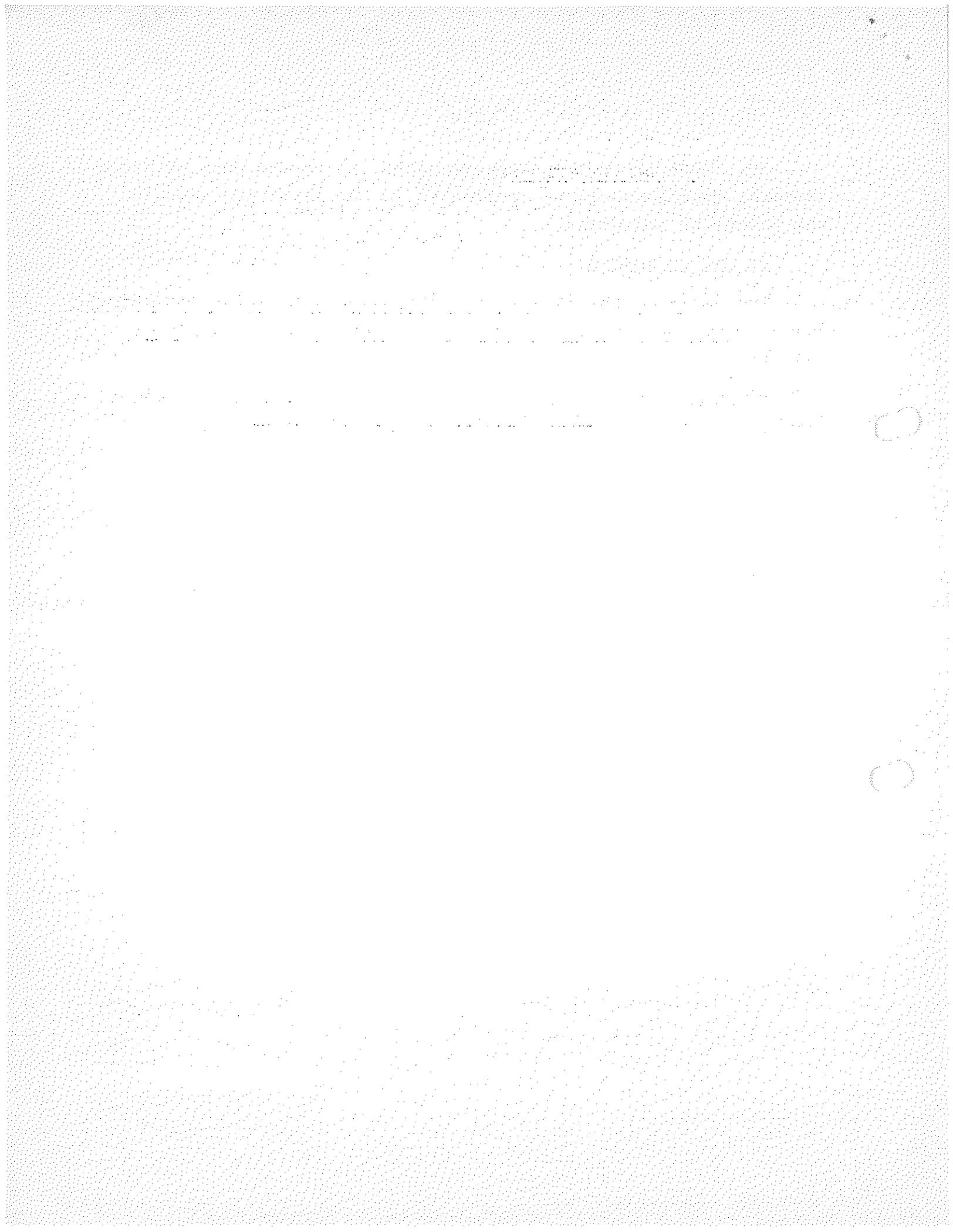
Mr. PRIVALON (USSR) suggested that, as in the case of gross tonnage, voting should be restricted in the first instance to the points of principle.

It was so agreed.

The CHAIRMAN put to the vote the question: which parameter, deadweight, volume or displacement, should be used for the formula determining net tonnage.

There were 2 votes in favour of deadweight, 14 votes in favour of volume and 20 votes in favour of displacement.

The meeting rose at 12.45 p.m.





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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE FIFTH MEETING

held at Church House, Westminster, London, S.W.1,
on Monday, 2 June 1969, at 2.30 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference (continued)	3

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED
BY THE CONFERENCE (continued)
(TM/CONF/WP.3; TM/CONF/3; TM/CONF/6;
TM/CONF/7; TM/CONF/9/Add.1; TM/CONF/C.2/1 to 3;
TM/CONF/C.2/WP.1 to 6)

Mr. ROCQUEMONT (France) thought that, on the basis of the indications provided by the votes taken at the previous meeting, it should be possible to establish a coherent system fairly close to Proposal C which could be applied universally without hampering the shipping trade.

Professor PROHASKA (Denmark) did not think that the decisions just taken could permit the adoption of Proposal C. The Committee had decided that the shelter-deck concept should apply to new ships, whereas Proposal C was based on a constant total volume for all parts of the ship. That proposal could not therefore be adopted unless the Committee were to take a vote on a new idea. He was also surprised that the majority of the Committee should have voted in favour of the use of volume to determine gross tonnage and displacement for net tonnage. The reverse would have been more comprehensible. The Committee would, however, have to continue its work with due regard for the result of that vote, a fact which would undoubtedly give rise to lengthy discussions.

Mr. CHRISTIANSEN (Norway) said that in principle his delegation approved the decisions taken, which should make it possible to reach a compromise between the Norwegian Proposal and Proposal C. He would have preferred the use of the volume concept for net tonnage but it was essential to try to arrive at a universal system. In regard to the comments of the Danish representative concerning total volume, it was to be hoped that the Committee would decide that the volume concept

should produce a gross tonnage as close as possible to existing values. The Committee would have to discuss the details concerning the calculation of gross tonnage, as there was a certain disparity between the French and the Norwegian Proposals. In the case of net tonnage, a fixed figure must be laid down.

Mr. SABET HABACHI (Suez Canal Authority) expressed reservations concerning the parameters chosen by the Committee. Gross tonnage was expressed in cubic metres and net tonnage in long tons. The concept of net displacement was unfair, because it penalized certain special types of ship and favoured shelter-deck ships. The Suez Canal Authority treated all ships on the same footing and applied a single tariff. The new system would involve the introduction of a tariff scale which would be difficult to calculate.

Mr. ROCQUEMONT (France), replying to the Danish representative, said that under the proposal to certify displacement, low-draught ships like open shelter-deckers would be treated appropriately, a low displacement being entered on the certificate. Such ships would therefore get favourable treatment in regard to port dues. Furthermore, there seemed to be little justification for using the term "shelter-deck" in connexion with ships of the future. The concept stemmed from the old regulations and, as a representative of United Kingdom shipowners had said, new ships would probably be built on the basis of the new regulations and there would be no further mention of shelter-decks.

In regard to the comment of the representative of the Suez Canal Authority, it had already been pointed out that displacement could be expressed in tons as well as in volume.

That was a secondary matter which should not trouble the Suez Canal Authority.

Mr. MURRAY SMITH (UK) pointed out that the vote on question 2 had shown that 16 representatives were in favour of the application of the open shelter-deck concept to new ships, but that it had not been decided whether that concept should apply to gross tonnage only or to net tonnage as well. In regard to displacement, most of the members of the Committee had probably considered that gross tonnage should be a fixed figure indicating the volumetric size of the ship and that the shelter-deck concept would be expressed in the form of a variable displacement in the case of net tonnage. If that were so, it would be better to state it clearly.

Mr. ERICSSON (Sweden) said that, in his opinion, the intention of the Committee, in deciding to retain the shelter-deck concept for new ships, had been to arrive at a system of tonnage measurement which could be applied immediately and would enable shipbuilders and shipowners to construct ships that were satisfactory both from the economic and technical point of view. Such ships might be of the current shelter-deck type but they might equally well be of a new type. The displacement system would be more flexible in that respect, but it should be expressed in volume.

Mr. DE JONG (Netherlands) recalled that the votes at the previous meeting had shown that 23 representatives were in favour of volume as the parameter for gross tonnage and of displacement for net tonnage. That could mean that many countries were in favour of Proposal C. The majority had expressed themselves in favour of retaining the shelter-deck

concept and to that end it would be advisable to take account of displacement alone. A gross tonnage based on volume could be obtained by using total volume, but it could also be obtained from a combination of the total volume and the displacement in order to arrive at existing figures.

He wished to draw the Committee's attention to document TM/CONF/C.2/WP.4. It should be borne in mind that the Suez Canal Authority used a net tonnage which did not tally with that obtained by applying displacement as the parameter. The Committee should take a decision which would assist the Canal Authority in its task. For example, a conversion factor could be applied to the total volume, and the deductible spaces mentioned on the certificate.

Mr. CHRISTIANSEN (Norway) pointed out that the Committee, by voting as it did, had not adopted Proposal C. It had chosen the parameter of volume to determine gross tonnage and of displacement to determine net tonnage; it had decided that two tonnage figures should be mentioned on the certificate and it could subsequently decide how those tonnages were to be calculated.

Mr. CUNNINGHAM (USA) endorsed the comments of the Norwegian representative. The Committee had not voted in favour of Proposal C which, as everyone knew, many countries could not accept. For the time being it would be better not to take decisions on too many matters before interpreting the

votes of the previous meeting. The Committee would have to give careful thought to the points made by the representatives of Norway and the Netherlands.

Mr. DE JONG (Netherlands) pointed out that the Committee had not cleared up the question of the second deck when voting to retain the open shelter-deck concept for existing ships. That was a vital point, for it was important to know whether the design of the ship would be influenced by the measuring system.

Mr. MUENCH (Israel) considered that the Committee's decision to retain the system of dual tonnages - despite the fact that two port authority representatives had stated that it was not, in their view, indispensable - stemmed from the desire to ensure the survival of the current system and to obtain figures as near as possible to the existing ones. The question, then, was whether the results obtained by using volume as the parameter for gross tonnage and displacement as the parameter for net tonnage would be close to the existing figures.

Mr. PRIVALON (USSR) considered that the results of the voting at the previous meeting were sufficiently clear for the Committee to be able to submit its report to the plenary. Many countries were currently using net tonnage to calculate harbour dues. The Committee had voted in favour of displacement for determining net tonnage, but no indication had been given of how to obtain results close to the existing ones. The possibilities were numerous and the question was a technical

one which would have to be discussed. What means could be used to obtain net tonnages, based on displacement, which would be comparable with existing net tonnages? It had been suggested that two net tonnages might be adopted once the question had been decided in plenary.

Mr. CHRISTIANSEN (Norway) pointed out that the Committee had decided to retain the shelter-deck concept, which meant having both gross and net tonnages. The Committee would subsequently have to discuss the difficulties inherent in such a system. As the representative of the USSR had stated, the questions which the Conference had referred to the Committee appeared to have been answered by the results of the Committee's voting.

Mr. WASILEWSKI (Poland) considered that displacement should be calculated in such a way as to be adaptable to the lowest load line.

Mr. ERICSSON (Sweden) said that his delegation could agree to the use of two parameters, but was not in favour of a dual system. The parameter adopted should give a clear indication of the size of the ship.

Mr. CUNNINGHAM (USA) stated that over the previous few days his delegation had examined the various compromise proposals. The use of displacement as a parameter would produce a 5 per cent deviation in the case of gross tonnage and a 13 per cent deviation in the case of net tonnage.

Mr. DE JONG (Netherlands) pointed out that the Committee had voted on whether there should be one or two tonnages but no-one had said that the two tonnages should be gross and net. Nevertheless, 23 delegations had voted in favour of volume for determining gross tonnage and 20 in favour of displacement for net tonnage.

The CHAIRMAN proposed that the Committee should vote on the question put forward by the United Kingdom representative, namely whether in the case of existing ships the shelter-deck concept should apply to net tonnage only or to gross tonnage as well.

It was so decided.

The CHAIRMAN put the question to the vote.

(In a preliminary vote, the Committee decided that the open shelter-deck concept for new ships should apply to net tonnage only.)

Mr. CHRISTIANSEN (Norway), supported by Mr. GUPTA (India), considered that if the open shelter-deck concept was to continue to be applied to existing ships, it was illogical that it should apply to net tonnage only in the case of new ships.

Professor PROHASKA (Denmark) noted that throughout its debates the Committee had always considered that existing ships, with or without shelter-deck, should retain their tonnage during a long transitional period.

Mr. DE JONG (Netherlands) requested the Committee, following the decision it had just taken, to make a ruling on the problem of the second deck.

Mr. CHRISTIANSEN (Norway) pointed out that under its terms of reference the Committee was only required to recommend to the Conference the choice of a parameter or parameters.

Mr. GUPTA (India) added that the question of the second deck was of minor importance and could quite well be discussed at a later meeting.

Mr. MUENCH (Israel) pointed out that the Committee was empowered to decide whether the net and gross tonnage values should be close to the old figures.

Mr. ROCQUEMONT (France) said that in his view it would be preferable to recommend that in the case of gross tonnage, the mean values should be close to the old figures. The problem was less important where net tonnage was concerned.

As to the deviation resulting from the choice of displacement as a parameter, the consequences were obvious: inevitably some ships would either be at an advantage or a disadvantage, as the case might be, if the system of measurement was changed. In any event the new system would be no more unfair than the current practice; existing ships would keep their present tonnage and two identical ships, flying different flags, would receive the same treatment.

Mr. PRIVALON (USSR) said he felt that the Committee should give itself time to think before rejecting the Israeli representative's proposal under which the parameters chosen should give results similar to the old values.

Mr. NOZIGLIA (Argentina) agreed with the views of the French representative.

Mr. WILSON (UK) recalled that the Sub-Committee on Tonnage Measurement had tried in vain to work out new values which would be close to the old ones. Since the methods of calculation were different, the Committee should try to arrive at figures which, as far as reasonably possible, did not differ too widely from existing values.

Mr. DE JONG (Netherlands) did not think that, in taking six decisions at its fourth meeting, the Committee had entirely fulfilled its terms of reference. It still had to define volume, specifying whether it meant total volume and defining the spaces included in that volume.

Professor PROHASKA (Denmark) thought that a deviation of 5 to 6% between the old and new values would be acceptable. Under the existing system, net tonnage represented 55% gross tonnage, but if the displacement parameter together with a conversion factor were adopted, the net tonnage would be higher than the gross.

Mr. GRUNER (Finland) said that, in his view, the new gross tonnage should be of the same order of magnitude as the old, in order to avoid having to alter all the statistics and figures in international conventions and agreements. Net tonnage should constitute a reasonable fraction of gross tonnage.

Mr. ROCQUEMONT (France) considered that, since displacement was a new concept, it was in no way essential to approximate the new net tonnages to the old.

Mr. CUNNINGHAM (USA) thought the Committee should not be content with values calculated in the light of figures in the conventions but should aim at values which were "as close as possible to the existing ones".

Mr. WILSON (UK) observed that if values close to the existing ones were to be obtained, coefficients would have to be applied to different types of ships and he gave an analysis of graphs 6 and 7 in Annex 2 which had been transmitted by the United Kingdom Government.

Mr. PRIVALON (USSR) said he was sure that all the members of the Committee wanted to establish values which would not result in excessive deviation and thus create difficulties for small shipping companies.

Mr. DE JONG (Netherlands) thought that if "mean" values were mentioned, deviations might nevertheless be very wide in the case of certain ships.

The CHAIRMAN suggested that the term "standard deviations" be substituted for "mean values".

Professor PROHASKA (Denmark) said that the standard deviations could not be the same for all ships. Moreover, it was not a concept the Committee was called upon to discuss at the present stage in its work.

Mr. MURRAY SMITH (UK), Mr. CHRISTIANSEN (Norway) and Mr. ERICSSON (Sweden) endorsed the views of the representatives of the USSR and Denmark.

The CHAIRMAN pointed out that at its morning meeting the Committee had reached only provisional conclusions, and that those should be confirmed, unless the Committee preferred, in the light of the debate which had just been held, to take a further vote on the various questions.

The Committee decided unanimously to confirm the conclusions it had reached during the morning (TM/CONF/C.2/WP.7).

The CHAIRMAN suggested that document TM/CONF/C.2/WP.7 should be submitted to the Conference along with the result of the supplementary vote on the application of the open shelter-deck concept to new ships for net tonnage only.

It was so agreed.

Mr. GUPTA (India) said his delegation considered that the open shelter-deck concept should be applied to new ships for both gross and net tonnage.

Professor PROHASKA (Denmark) wondered whether the decision taken on the application of the open shelter-deck concept to new ships for net tonnage only had not been taken prematurely. Some delegates, when they voted, seemed to have been under the impression that net tonnage was always used as the basis for port dues, whereas in fact some ports used gross tonnage. He therefore, proposed, that a new vote be taken on that question.

Mr. GUPTA (India) and Mr. GRUNER (Finland) supported Professor Prohaska's proposal.

Mr. PRIVALO (USSR) pointed out that document TM/CONF/10, dated 31 January 1969, gave all the information available to IMCO at that date on national practices regarding port dues, and that it was clear from that information that the majority of States used net tonnage. In the circumstances it seemed unnecessary to take another vote.

Mr. CHRISTIANSEN (Norway) emphasised that the Committee had decided that the open shelter-deck concept should be applied to new vessels for net tonnage only, and had merely mentioned that efforts should be made to obtain for those vessels, values as close as possible to the existing values.

Mr. GUPTA (India) suggested that, since a decision had already been taken in favour of net tonnage, the discussion should be limited to the question of whether the open shelter-deck concept should also be applied to gross tonnage.

Mr. GRUNER (Finland) said that in the third plenary meeting Lord Simon, speaking for the International Association of Ports and Harbors, had indicated that port authorities might prefer in the future to assess dues on the basis of the gross tonnage.

Mr. RUSSEL (South Africa) was concerned lest the port authorities should be led to impose the tonnage mark again. It might be a good thing to consult the International Association of Ports and Harbors on that point.

Mr. GUPTA (India) thought it undesirable, at such a late stage in the discussions, to approach an association which was not part of the Organization.

The PRESIDENT invited the Committee to state its position.

The Committee confirmed, by 19 votes to 13, its view that the open shelter-deck concept for new ships should apply to net tonnage only.

The CHAIRMAN suggested that the result of the vote should be included in document TM/CONF/C.2/WP.7, which would be transmitted to the Conference.

It was so decided.

The CHAIRMAN stated that the Committee had concluded its examination of the general questions referred to it by the Conference. In order to speed up the work, members might wish to proceed at once to a preliminary exchange of views on the exact nature of the volume which was to serve as the parameter for calculating gross tonnage.

Mr. HUSSEIN (Kuwait) thought it would be better to wait until the Conference had reached a decision on that point.

The CHAIRMAN thought that in view of the short time available to the Committee there would be no objection if it started to fill in the details of the answer which it had thought fit to give to the question submitted to it.

Mr. PRIVALON (USSR) said that the terms of reference given to the Committee expressly mentioned both Proposal C and the Norwegian Proposal, since amended by document TM/CONF/C.2/WP.6.

It was therefore the Committee's duty to consider both proposals. The Soviet delegation for its part considered both the concepts of volume, as set out in the two Proposals, perfectly acceptable for determining gross tonnage.

Mr. ROCQUEMONT (France) said that if the Conference decided to use volume as the parameter for calculating gross tonnage, the Committee would have to choose between the two concepts of volume. As it was important to make the rules as simple as possible, the French delegation much preferred the concept set out in Proposal C, because the use of total volume avoided the need for complicated definitions and for any references to constructional details or the nature and use of spaces.

Mr. CHRISTIANSEN (Norway) pointed out that in document TM/CONF/9/Add.1, his Government had clearly stated its view on how gross tonnage should be determined; by the use of a conversion factor it was possible to take certain spaces into account without the need for measuring them. Proposal C, on the other hand, would require a definition of completely open spaces and of cargo spaces.

Mr. ROCQUEMONT (France) said he had already pointed out that if the Norwegian Proposal were accepted it would be absolutely necessary to define closed spaces by reference to open spaces, whereas Proposal C would entail the measurement of closed spaces only and would abolish the fiction of tonnage openings. It was also necessary to provide for the case of vessels without a deck.

Mr. ERICSSON (Sweden) said that there was really very little difference between the two proposals. Proposal C had its drawbacks, of course, particularly for small vessels, but it could not be denied that the concept of total volume had the great advantage of simplicity. Perhaps the revised Norwegian Proposal might make a good compromise, but cargo spaces would have to be defined.

Mr. WILSON (UK) stated that his Government's main objection to the conversion factor proposed by Norway was that its application to vessels of less than three thousand tons would ensure that no small Norwegian vessel would suffer an increase in tonnage. He had, moreover, already taken an opportunity of emphasizing the difficulty of defining cargo spaces.

The United Kingdom Government had submitted, in document TM/CONF/C.2/2, a draft amendment to Regulation 6 of Proposal C, which would have the effect of substantially reducing certain figures.

Mr. CHRISTIANSEN (Norway) said that his delegation intended to withdraw its proposal to introduce a conversion factor for small vessels.

Professor PROHASKA (Denmark) thought it would be a good thing if the Norwegian delegation was invited to submit a revised text of its proposal, so that the Committee could consider in detail what spaces would be included in the calculation of gross tonnage under the terms of that proposal.

Mr. HÜNNICH (Federal Republic of Germany) said he favoured the adoption of the total moulded volume, which gave a true idea of the dimensions of a vessel. If the Norwegian Proposal was adopted, a definition of cargo spaces would become necessary, and that would inevitably have an effect on ship construction.

The CHAIRMAN hoped that the Norwegian delegation would be able to revise its proposal.

Mr. CHRISTIANSEN (Norway) said that as soon as the Conference had stated its views on the Committee's future work, his delegation would revise its proposal to the extent that it considered this necessary.

The meeting rose at 5.20 p.m.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE SIXTH MEETING
held at Church House, Westminster, London, S.W.1,
on Tuesday, 3 June 1969, at 4.50 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES

The CHAIRMAN proposed that the Committee proceed to draw up definitions to serve as a basis for the deliberations of the working group which was to be set up on the calculation of conversion factors. As far as gross tonnage was concerned, it was evident from earlier discussions that the main parameter should be a volumetric one. Proposal C, which suggested that gross tonnage should be calculated from the ship's total volume, called for a definition of open and closed spaces. The Norwegian Proposal (TM/CONF/9/Add.1) required a definition of passenger spaces situated above deck and of under-deck cargo spaces which might also be included in the gross tonnage if the proposal were modified.

Mr. CHRISTIANSEN (Norway) observed that his delegation intended to submit a compromise proposal the following day which would include, in the calculation of gross tonnage, the under-deck volume supplemented by cargo spaces and passenger spaces situated above deck and, if necessary, the hatchway tonnage. Although no other spaces (crew, safety equipment, chart room, etc.) would be included in the gross tonnage, they would be taken into account by applying to the ship's total volume a coefficient which would enable designers to extend those spaces in the interests of crew welfare and safety without increasing the tonnage.

Mr. ROCQUEMONT (France) said that the decision taken at the plenary meeting to base the calculation of gross tonnage on the ship's volume, doing away with the shelter-deck concept and the dual value for gross tonnage, simplified the problem and made

the definition of a deck unnecessary. The advantages which the Norwegian Proposal would offer in excluding from the gross tonnage the service spaces in the superstructures were doubtful and Proposal C had the advantage of being simpler - since it did not call for a definition of the various spaces - and of offering, for the calculation of gross tonnage, a parameter (total volume) which was at once intangible and representative of the ship; that seemed to meet the wishes expressed during the general debate and it was useful for statistical purposes and for certain operations such as towage.

Mr. CHRISTIANSEN (Norway) stressed that the spaces under discussion would not be excluded from the ship's gross tonnage as account would be taken of them in a conversion factor applied to the volume of the spaces directly measured which would in effect be the equivalent of the new tonnage unit in Proposal C designed to give results very similar to existing tonnage values.

Mr. ROCQUEMONT (France) considered that under the Norwegian Proposal gross tonnage would not be related to the ship's actual volume and might thus differ for two ships having the same volume but different space distribution; that was contrary to rational tonnage measurement. Proposal C, on the other hand, made provision for the new tonnage unit to be applied to all parts of the ship without distinction.

Mr. PROHASKA (Denmark), pointing out that the Technical Committee would have to choose between Proposal C and the Norwegian Proposal, listed some of the advantages and disadvantages of those proposals. Proposal C had the drawback that all crew spaces were included in the calculations and some shipowners might tend to cut down on such spaces; in that sense the Norwegian Proposal seemed preferable. In regard to the definition of gross tonnage, however, he explained to the Committee, illustrating his ideas on the blackboard, that in so far as possible it should not be influenced by the design of the ship; a very slight design modification might produce a substantially lower gross tonnage but might make the ship less seaworthy.

Mr. OVERGAAUW (Netherlands) agreed with the French representative that if the Norwegian Proposal were adopted a definition of the decks would be necessary so as to prevent such practices as the incorporation in the design of a stringer designated as a deck.

He was not in favour of adopting a new unit and would prefer the use of a conversion factor. His delegation intended to submit a proposal with regard to the use of a conversion factor at the next day's meeting.

The CHAIRMAN said there were two alternatives: to exclude certain spaces in calculating a ship's tonnage - more precisely, to provide an overall volume for crew spaces, which would then be the only spaces requiring measurement - or to measure everything in order to avoid difficulties. The Committee should begin by taking a decision on that point.

Mr. WILSON (UK) pointed out that the Norwegian Proposal would demand a precise definition of certain spaces, and in particular a definition of the "upper deck", as certain spaces above that deck were included in the tonnage calculation. There would also have to be a precise definition of cargo spaces which, in the view of his delegation were not defined clearly enough in document TM/CONF/9/Add.1. In the case of refrigerated ships, for instance, it would be necessary to decide whether the refrigeration equipment spaces should be treated as cargo spaces; he himself considered that they should. Cargo spaces would have to be measured up to the boundary bulkheads, and if necessary a conversion factor would have to be applied to them.

Mr. CHRISTIANSEN (Norway) said that his delegation did not wish to submit an entirely new proposal but merely to put forward a suggestion concerning the calculation of gross tonnage. It was indeed necessary to define what was meant by the "upper deck", bearing in mind the definitions in the International Convention on Load Lines.

He thought it would be fairly easy to find a single conversion factor to cover frames, floors and crew spaces, as had been suggested by the representative of the United Kingdom.

Mr. DE JONG (Netherlands) also considered that if the Norwegian Proposal were adopted a precise definition of decks would have to be provided. However, any proposal which required a definition of decks appeared undesirable to him. Such proposals might affect ship construction, as had been shown at the blackboard by the representative of Denmark.

He agreed with the representative of the United Kingdom that it was difficult to define cargo spaces and crew spaces.

As the representative of France had rightly pointed out, the shelter-deck concept had not been retained by the Committee. For calculating net tonnage, therefore, the total volume of the ship would be used, with or without a conversion factor. The Committee would have to decide whether it was desirable to apply a conversion factor and, if so, what its value should be.

Mr. CUNNINGHAM (USA) drew the Committee's attention to document TM/CONF/C.2/3, which his delegation had submitted for information, and in which a comparison had been made by a computer study between Proposal C and the Norwegian Proposal, ignoring cargo spaces above deck, which appeared to exist on few vessels. That document might be useful to give an idea of the standard deviation which would result from the adoption of the Norwegian Proposal or of Proposal C.

The meeting rose at 5.25 p.m.



IMCO

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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE SEVENTH MEETING

held at Church House, Westminster, London, S.W.1,
on Wednesday, 4 June 1969, at 9.40 a.m.

Chairman: Mr. F. SPINELLI (Italy)

Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference (continued)	3

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED BY
THE CONFERENCE (continued) (TM/CONF/WP.3;
TM/CONF/6; TM/CONF/9/Add.1; TM/CONF/C.2/WP.9)

Calculation of gross tonnage (continued)

Mr. CHRISTIANSEN (Norway) explained that his delegation's modified proposal, published as TM/CONF/C.2/WP.9, aimed at accommodating many of the suggestions put forward by equating the gross tonnage of a ship to the total volume of its enclosed spaces less the volume of certain enclosed spaces for crew, navigational and safety purposes, the latter to be carefully defined.

The tonnage thus arrived at would be multiplied by a coefficient so as to give a figure as close as possible to existing tonnage measurements, as was the intention, too, in the rival Proposal C.

Mr. DE JONG (Netherlands) stated that in principle his delegation was in favour of the new Norwegian Proposal.

Mr. CUNNINGHAM (USA) considered that the Norwegian Proposal represented an important compromise which would relieve any pressure on shipowners to provide insufficient crew space and on port authorities to abandon the concept of net tonnage. His delegation strongly endorsed the proposal.

Mr. PROHASKA (Denmark) said that his delegation preferred the Norwegian Proposal to Proposal C but felt that the list of deductible spaces would require lengthy discussion; such problems as the definition of heating and ventilation spaces for crew purposes on passenger ships were bound to arise.

He foresaw another difficulty in the case of small ships, of which there were many in service all over the world. It had been generally agreed that the new tonnage system should in no

way influence ship design but small ships, which usually had a comparatively high volume and a freeboard or tonnage mark on a second deck, would find the concept of gross tonnage dependent on total volume uneconomical and shipowners would revert to the practice of building ships with one deck only, thereby making them considerably less safe. Since small ships already had an accident rate of ten times the average the matter had to be given serious consideration before a final decision could be taken.

Yet another problematic issue was that of container ships of the future, which would have minimum freeboard and very little gross tonnage, since no additional term had yet been proposed to cover deck cargo; some such factor as 0.6 times total deck cargo volume would perhaps be suitable.

The CHAIRMAN observed that while the Technical Committee could recommend to port authorities that deck cargo be taken into account in the calculation of harbour dues, it was not in a position to insist that stipulations regarding deck cargo be included in the tonnage certificate.

Mr. PROHASKA (Denmark) pointed out that an owner whose ships were likely to carry deck cargo at any time could be required to make statements to that effect, so that the information, together with the maximum permissible height etc. of such cargo, would figure in the tonnage certificate. Any owner illegally carrying deck cargo could then be fined in the same way as for instance an overloading offence.

Mr. ROCQUEMONT (France) observed that the Norwegian Proposal raised two main issues; namely the need for and nature of the proposed conversion factor, to which subject he would refer back later, and the definition of total volume and list of spaces for possible exemption. His immediate reaction

to the second issue was that while it was to be welcomed that such spaces were deductible regardless of their position in the ship, the principle of exemption nevertheless depended heavily on the definition of their nature and use. Any long and careful definition which might be provided would certainly be criticized for being too complex and contrary to the spirit of the Melbourne Resolution, which called for simplicity. Furthermore, although the total volume of a ship was a basic definition and one necessary in the provision of port services and so on, the gross tonnage as written into the certificate on the Norwegian Proposal would be independent of total volume.

For all these reasons the French delegation had decided to hold firmly to the concept of total volume without exemptions, as embodied in Proposal C.

Mr. PRIVALON (USSR) expressed his delegation's interest in the modified Norwegian Proposal, but cautioned that while it had the advantage of relieving any pressure on designers to cut down on essential crew space it nevertheless had the disadvantage of requiring many definitions and thus re-introducing the risk of subjective interpretations.

He went on to make a plea that the Committee should confine itself to finding a solution based on proposals already before it and refuse to consider totally new suggestions at the current stage of discussion.

Mr. WILSON (UK) congratulated the Norwegian delegation on its compromise solution but expressed his doubts regarding the proposed conversion factor and on the feasibility of finding acceptable definitions for all the exempt spaces.

Experience had shown that it was difficult to enumerate and define adequately all crew spaces, including such possibilities as spare cabins.

Furthermore, since the exempt spaces in question might amount to as much as five hundred gross tons, there was a real risk that the figure for gross tonnage reached on the Norwegian basis would give an erroneous idea of the actual total size of the ship.

Regarding the temptation to shipowners to provide insufficient crew space mentioned in connexion with Proposal C, he felt that the risk was very slight; owners usually went far beyond the requirements of existing national and international regulations and recognized the fact that crews would not be attracted to inadequate vessels. He therefore endorsed the views expressed by the delegations of France and the Soviet Union.

He furthermore pointed out that it was current United Kingdom port practice for all deck cargo spaces to be measured and included in the total cargo space of ships.

Mr. MUENCH (Israel) expressed his satisfaction that the choice of formula had been narrowed down to two versions and stated that, of those two his delegation preferred the use of gross total volume as a measure of gross tonnage, both because it was more representative of ship size and because it required far less definition than would any exempt spaces introduced. Furthermore, his delegation did not believe that a tonnage measurement regulation should attempt to influence shipowners on the matter of ship design; other regulations already took care of the seafarers' interest in that respect.

Mr. DE JONG (Netherlands) pointed out that for small ships under five hundred gross tons, in particular, such matters as the extent and arrangement of crew space could be very important. Any measures influencing shipowners to provide open passageways instead of closed passageways or to cut down on the number of staff on board would be most undesirable. Provided that adequate consideration was given to those matters, however, his delegation still believed that the advantages of the Norwegian Proposal outweighed the disadvantages.

Mr. SOLDA (Italy) said that his Government believed that the aim of the Convention should be to simplify existing regulations as far as possible; it therefore lent its support to Proposal C.

Mr. ROCQUEMONT (France) noted that on the basis of the Norwegian Proposal such anomalies as two ships of the same size being assigned very different gross tonnages could arise and recalled that in Plenary session the Conference had supported the concept that gross tonnage should be based on volume measurement.

On the subject of crew safety, he pointed out that the need to protect personnel working or walking on deck had been recognized in the 1966 Load Line Convention; if the Committee found that such protection was inadequate it could better deal with the matter by an amendment to that Convention, rather than by making stipulations in a tonnage definition.

Mr. WILSON (UK) observed that the Norwegian idea of including an ideal conversion factor in the gross tonnage formula so as to bring the figure obtained as close as possible to existing values, was a rather vain hope; the Proposal C concept of multiplying the total volume by 120 would give more realistic results. If the final figures obtained from the two proposals turned out to be closed, however, then Proposal C still had the great advantage of simplicity.

The CHAIRMAN pointed out that the conversion factor in neither case had to be a constant; it should rather be some function of the total volume such as a constant, plus a second constant multiplied by a logarithmic function of the volume.

Mr. ZAMBRANO (Venezuela) supported the idea that tonnage measurement should be based on total volume, as advocated by the representatives of France, Israel and Italy. It was used for gross tonnage in his own country's tonnage measurement rules; and it gave a precise indication of a ship's dimensions.

Mr. MÜNNICH (Federal Republic of Germany) said that the gross tonnage parameter should be as simple as possible and should indicate the size of a ship. That could best be achieved by using total volume. It was in accordance with the resolution of the International Association of Ports and Harbors (TM/CONF/12) and it would keep the number of definitions to a minimum. Although in practice the difference between the new and the existing gross volume should not be too great under the new Norwegian Proposal, trouble would be caused if too many definitions of the use of spaces were required.

Mr. KING (Kuwait) shared the concern expressed over the Norwegian Proposal. The system it provided for might open the way to manipulation by shipowners because, with factor (a), gross tonnage could be influenced by the addition of washrooms or other facilities. He also feared that if deductions or exemptions were permitted there was a danger of losing sight of the ship's real volumetric size.

Mr. PEREIRA (Brazil) said that his delegation supported the views of the Israeli representative. Gross tonnage should not influence a ship's design. In practice it would be difficult to apply gross tonnage depending on the nature and position of certain spaces. Gross tonnage, which should indicate the size of a ship, would provide a simple system and the desired uniformity.

Mr. GUPTA (India), while appreciating the Norwegian representative's effort as a compromise, said that the numerous exemptions embodied in his proposal would bring matters back to existing conditions. The purpose of the Conference was to devise a new and simple system for measuring tonnage. He supported the simple idea provided by Proposal C and the total volume concept. He agreed with the representatives of France and the United Kingdom on the question of a constant as factor: that could be discussed later. Whatever formula was devised for gross or net tonnage it should not limit the freedom of countries or shipowners to decide crew spaces as they wished. In principle, gross tonnage should be a volume measurement and should not be hampered by deductions.

Mr. NOZIGLIA (Argentina) also considered that the total volume should be used for tonnage measurement, chiefly because it would facilitate determination of a ship's tonnage. The alternative proposal, involving deductions for crew spaces, would give rise to difficulties of definition, because in many ships certain spaces were used by both crew and passengers.

Mr. BONN (Canada) agreed with the Brazilian representative that one of the important requirements for a new tonnage measurement system was that it should not influence design. That would be difficult to achieve unless deductions were very accurately defined. The total volume concept with factors as close as possible to existing ones was the simplest system. It would preclude the risk of manipulation and give the true size of a ship more consistently. He accordingly supported Proposal C.

Mr. DE JONG (Netherlands) said that since everyone was anxious that a tonnage measurement should not influence ship design; if the inclusion of crew spaces would influence design, they should be omitted.

Mr. HERD (Australia) said that he, too, was in favour of the total volumetric concept. On the question of the influence of crew spaces on design, he said that in Australia manning practice was based on agreement between the Unions and the shipowners, with the Government acting as referee. The numbers of crew were decided according to the workload and the crew accommodation regulations and standards were provided in accordance with conditions on most first-class passenger ships. Thus in Australia crew accommodation was provided for in the design on a basis other than the limitation of the ship's tonnage. That might have disadvantages for shipowners, but there would also be disadvantages under the volumetric system.

Mr. CUNNINGHAM (USA) maintained that the total volume concept would affect ship design. It had once been said that no one could invent a tonnage system that the naval architects could not defeat. If the total volume concept were adopted the naval architects would find a way of decreasing the volume. Proposal C might suit the port authorities but they were not the only interests to be considered.

Mr. ERICSSON (Sweden) said that he sympathized with the Norwegian representative in his wish to provide for crew space and accommodation. The idea should not be ruled out: it should be carefully considered to see if suitable definitions could be agreed on. He did not entirely agree with representatives who had said that tonnage should be independent of all other regulations such as safety, crew space and accommodation. The suggestion that the total volume concept would influence design might apply equally to the new Norwegian Proposal. If all crew spaces were deducted, there was no guarantee that safety regulations and crew spaces would be adequately provided for. There were disadvantages to both proposals, but they should both be studied and when the details involved in the Norwegian Proposal were known, it should be possible to decide which was better from all points of view.

Professor PROHASKA (Denmark) strongly supported the Swedish representative's comments. The new Tonnage Measurement Convention should not deal with safety, but at the same time it should not impede safety. Recent history had shown that open shelter-decks with tonnage openings were dangerous, especially to small ships, and it had been agreed to abolish them. Tonnage regulations had long conflicted with safety: there was no point in producing a new Convention which conflicted with safety. He did not agree with the USSR representative that the Committee should not discuss new points. The Committee was still dealing with gross tonnage, using volume as the main parameter, but there might be other aspects besides crew that should be considered. Both the proposals illustrated on the blackboard favoured ships with low freeboard and high deck cargo. Was that what the Conference wanted? Both conflicted with safety for both small and large ships.

The CHAIRMAN reminded the Committee that it would have to reach a decision on gross tonnage before starting to discuss net tonnage, otherwise there would be confusion. He hoped the Committee would be able to decide on a solution which would gain general support in the plenary meeting.

Professor PROHASKA (Denmark) suggested that, since it had been pointed out that coefficient "a" would be different in each of the two formulae, they should be renamed coefficient a_1 and a_2 respectively. Before ending the discussion, the Committee might consider other possibilities than a coefficient depending solely on volume. Although he had earlier stressed the importance of safety for small ships, in view of the lack of support, he withdrew his proposal for including an imaginary deck volume. The Danish shipowners were strongly opposed to the idea and there might be other more logical solutions. He had once during discussion on safety by Danish naval architects suggested that owners should not be penalized in tonnage for excess freeboard. There had recently been a growing trend for owners of small ships to choose shelterdeckers rather than single deckers with heavy deck loads, a choice which had greatly reduced casualties. He cautioned the Committee against favouring unsafe ships. The two deck ship would no longer be competitive and owners would prefer single deckers, which were less safe. He suggested that if a working party were set up to consider the two coefficients, it should be requested to consider the feasibility of including a term in one of them to take account of excess freeboard.

Mr. DOUGHERTY (Liberia) said that the main aim in considering the two formulae was to avoid undue influence on crew space. For the purposes of bigger and better crew quarters, the formula $GT = a (V-c)$ was the one which his delegation would support.

Mr. GUPTA (India) suggested that a solution might be reached if some means were found of ensuring that the crew spaces would not be affected by the formula adopted. He wondered whether some incentive could be offered to shipbuilders, to encourage them to provide improved crew spaces, for example, by giving them some tonnage advantage.

Captain FOTIADES (Greece) agreed with the United States representative. He added that the general feeling seemed to be in favour of a calculation which would produce numbers as close as possible to the existing ones. He suggested that there should be some differentiation in the factors for different types of ship, on the lines suggested by the USSR.

Mr. DOUGHERTY (Liberia) said that he was not in favour of the Indian representative's suggestion because it would impose a limit on the size of crew space.

Mr. ROCQUEMONT (France) said that the type of convention which would attract the greatest number of ratifications by governments should be as simple as possible and as close as possible to the resolution adopted by the International Association of Ports and Harbors which had been unanimously adopted by representatives from all over the world. He was sure that the port authorities would urge their governments to ratify a simple convention. He therefore advocated Proposal C.

The Danish representative's suggestion for including a coefficient for excess freeboard might result in lower gross tonnage but higher freeboard. Ships with excess freeboard were automatically favoured because displacement was reduced. The danger with displacement was that if limitations were accepted on the principle of total volume a precedent might be set for only reductions or exemptions in displacement: in other words, there would be no real displacement. He urged the Committee to bear in mind the need for the simplest possible scheme for both parameters and to avoid complications.

Mr. SATO (Japan) expressed his preference for the new Norwegian Proposal, because the inclusion of crew space in gross tonnage would affect small ships, especially fishing boats. Its only disadvantage was its complexity. He wondered whether it would be possible to simplify the definitions of crew space.

Mr. NOZIGLIA (Argentina) said that it was unfortunately not possible in the Convention to take account of such aspects as safety and accommodation spaces. That, however, should not preclude their consideration. The purpose of tonnage measurement was to ensure the most profitable operation of ships and the greatest safety. Tonnage measurement should therefore provide sufficient flexibility. Hence, volume should not include crew spaces.

Mr. DE JONG (Netherlands) suggested a compromise between the two formulae. The first formula should be used in such a way that the existing gross tonnage minus crew accommodation spaces would be "a(V)". In doing so, existing gross tonnage should be used at open and closed shelter-deck values minus crew space for all kinds of ships.

Mr. MURRAY SMITH (UK) said that he had been puzzled over the vehemence of the support for the idea of taking account of crew spaces in ships. He had doubts about the scope of some of the items listed in the Norwegian Proposal. For example, could item (2), rooms for the safety equipment, be interpreted to mean space for CO₂ or appropriated for fixed ballast or water ballast? He would welcome a more detailed discussion before the Committee took any decision.

He foresaw difficulties in applying and defining the precise nature of deductions under items (1), (2) and (3), and extreme difficulties of interpretation in respect of passenger ships. Who, for example, would decide what might be included under the umbrella of galleys, ventilation, air-conditioning or even libraries?

For those reasons his own and other delegations wanted to narrow down what was intended by the supporters of the very laudable attempt at a compromise. His delegation was sure that the application of the gross volume concept would provide the same type of solution as the present very complex and ill-definable set of deductions.

Mr. MUENCH (Israel) disagreed with the argument that provision as made in formula 2 for deduction for crew space would give values nearer to existing gross tonnages, for most of the space thus to be exempted was at present included for gross tonnage calculation. It would be useful if the possible variations for the coefficient "a" could be given, in order to ascertain whether the resulting values would in fact be nearer existing gross tonnages, particularly in the case of small ships.

Mr. ROCQUEMONT (France) fully endorsed the comments made by the United Kingdom.

Mr. RUSSEL (South Africa) pointed out that his country maintained as a fundamental principle that one set of regulations should not affect another. It would therefore not be conceded that tonnage regulations should affect crew space regulations and, if such should prove to be the case, resulting disadvantages would be rectified by amendment of the latter.

Mr. CHRISTIANSEN (Norway) reiterated that document TM/CONF/C.2/WP.9 had been submitted purely to aid the Committee in reaching an acceptable compromise; it was not a direct proposal on Norway's part. The document stated explicitly that the crew spaces for which deduction should be made were spaces for the exclusive accommodation of master and crew; and the matter of such accommodation had been exhaustively discussed in the Sub-Committee.

As to rooms for the safety equipment, he was unable to go into detail, but could safely say that at sea water ballast space would never be regarded as space for safety equipment.

Professor PROHASKA (Denmark) disagreed with the argument adduced by France in answer to his previous point. For practically all countries, manning of ships was based on gross and not on net tonnage; under formula 1, therefore, ships with a high freeboard would be penalized and would tend to go out of production in favour of ships of lesser safety. An alternative which he knew in advance would be unpalatable would be to use displacement volume.

Mr. DE JONG (Netherlands) said that, from the safety angle, he fully agreed with Denmark's ideas; but unfortunately their application in respect of gross tonnage would lead to too wide a disparity with present figures.

Mr. ROCQUEMONT (France) said he failed to see how simple regulations could be an obstacle to maritime safety. The Committee should bear in mind the decisions taken the previous day, plainly evincing the general desire to discourage future building of small open shelter-deck ships of the type Denmark had in mind. Naval architects might be trusted to design ships complying with the regulations as laid down and at the same time incorporating adequate safety features.

Professor PROHASKA (Denmark), illustrating his arguments on the blackboard, maintained his point that the ship of low freeboard, whether with one or two decks, and the container ship with freeboard equivalent to 40% of draught were less safe, due to possibilities of listing and/or capsizing, as compared with the ship of higher freeboard. Using total volume as the basis for gross tonnage would encourage design to give lower freeboard, to the detriment of safety of life at sea. His earlier proposal was predicated on that thesis.

The CHAIRMAN suggested, in the interest of advancing the work, that speakers should confine their remarks to the question whether a factor providing for deduction of crew space should be included in the formula for gross tonnage.

Mr. LEE (China) said that his delegation supported in principle the compromise solution represented by formula 2 and would co-operate in efforts to arrive at an acceptable definition of crew space.

Two different values for the coefficient "a" might be included in formula 2, giving the equation $GT = a_1V - a_2C$; and the working group should take into consideration the fact that "a₂" would have values for small as well as large ships.

Mr ERICSSON (Sweden) maintained the stand already taken by his delegation. He would, however, be unable to vote on either formula without some precision on which of the problems inherent to the existing regulations would be ironed out by providing for a deduction for crew space. In his opinion, ship size was not a relevant parameter, for instance, for resolving such matters of difficulty as manning with respect to the 500 gross ton limit, concerning wireless requirements with respect to the 1600 gross tons limit etc., and in any case a convention on tonnage was not the appropriate vehicle for dealing with such matters.

Mr. ROCQUEMONT (France), while agreeing that the comments of Denmark were perfectly true, for both large and small ships incidentally, thought the whole Danish thesis amounted to an indictment of the decisions already taken concerning shelter-deck ships, decisions which could not now be changed.

Mr. MURRAY SMITH (UK) assumed from the lack of comment on his earlier remarks that the existence of serious problems of the definitions of crew spaces was generally accepted. Accordingly, his delegation's position remained the same.

Secondly, it would be unfortunate if a public impression were given that the Conference accepted without query that small single-deck ships as such were unsafe.

Mr. DE JONG (Netherlands) reiterated his earlier proposal that formula 1 should be used in the way he had outlined.

Secondly, the discussion on Denmark's suggestion showed that the Committee still generally favoured Proposal C, providing for two figures, gross tonnage based on total volume and net tonnage on displacement with exemption for crew space. If that solution was finally adopted, the Conference should recommend to IMCO that the limits laid down under the Safety of Life at Sea and the Load Line Conventions should be dependent on displacement.

Mr. CUNNINGHAM (USA) proposed the following formula for the calculation of gross tonnage, as a compromise which would avoid difficulties of definition and would place no limitation on excess provision for crew accommodation:

$$GT = a(V-nA)$$

n = Number of crew in excess of 40
A = Constant representing standard volume per crew member.

Answering a point raised by the United Kingdom, he explained that 40 was a good average figure for cargo ships.

Professor PROHASKA (Denmark) said that both the Netherlands and the United States proposals were attractive at first sight, but the first would result in gross tonnages lower than at present and the second would still penalize shipowners providing crew accommodation above the minimum and would not cater for the special problem of crew accommodation on small ships.

The meeting rose at 12.45 p.m.



TM/CONF/C.2/SR.8
4 June 1969
Original: FRENCH

IMCO

FOR PARTICIPANTS ONLY

* INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE EIGHTH MEETING
held at Church House, Westminster, London, S.W.1,
on Wednesday, 4 June 1969, at 2.30 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2, and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

TM/CONF/C.2/SR.8

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference (continued)	3

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED
BY THE CONFERENCE (continued) (TM/CONF/3;
TM/CONF/6; TM/CONF/7; TM/CONF/9/Add. 1;
TM/CONF/C.2/1 to 3; TM/CONF/C.2/WP.1 to 9)

Mr. CHRISTIANSEN (Norway) said that he could not support formula 3 proposed by the United States delegation. He felt that Denmark's proposal was an interesting one, but he was not yet in a position to make a decision.

Mr. PROHASKA (Denmark) announced that his delegation would submit a written proposal to the next meeting of the Committee.

Mr. DE JONG (Netherlands) thought that the Committee might instruct a small group to examine formula 1, after which a working group might submit recommendations with regard to coefficient a.

Mr. PROHASKA (Denmark) recalled that in the opinion of some delegations the coefficient could vary according to the size of the ship. One third of the world's shipping fleet was made up of small ships, so care should be taken not to adopt a formula which would make it impossible to operate those ships. No-one knew the exact implications of the three formulae proposed, so it would perhaps be advisable to refer them to three working groups for consideration.

The CHAIRMAN said he did not agree with that view, as the problem of coefficients was the same for all three formulae.

Mr. ROCQUEMONT (France) was of the opinion that the Committee should concentrate on formula 1, which seemed to enjoy widespread support. His delegation had no objections to a variable coefficient based on volume alone, although a number of studies would have to be made. The Sub-Committee on Tonnage Measurement had not examined any formula with a variable coefficient, and

he himself was in favour of a constant coefficient as provided for in proposal C; he thought the value might be expressed in metric tons since the metric system was being increasingly used in all international conventions and agreements.

Mr. SOLDA (Italy) said that he was in favour of a simple solution based on the concept of total volume, but would be prepared to support the United States formula, since the working group would study the problem of coefficients according to very definite instructions from the Committee.

Mr. PRIVALON (USSR) felt that formula 2 raised problems of interpretation and was thus not readily acceptable; the Committee should therefore choose between formulas 1 and 3 and request the working group to study coefficients without insisting on the question of the number of crew members.

Mr. CHRISTIANSEN (Norway) pointed out that in formula 2 proposed by his delegation the coefficient was constant except in the case of small ships.

Mr. MURRAY SMITH (UK) agreed with the USSR representative that formula 2 seemed to command less support because of the difficulties of interpretation it raised. As to formula 3, his delegation understood that some delegations wished the concept of crew - either the number of crew members or the volume of crew spaces - to be included in gross tonnage calculations. As the crews of small ships were proportionately larger than those of big ships, the use of that concept would result in lower tonnages for small ships. However, it was a concept that went against

the crew's interests since it meant that crew space would be more restricted. There was a far more satisfactory way of calculating the gross tonnage value for different sizes of ships, namely the coefficient $C = 0.135 + 0.035 \log. V$ proposed by the Government of the Netherlands (TM/CONF/3, page 37).

Mr. PROHASKA (Denmark) drew the Committee's attention to the table in Appendix II of the United States document (TM/CONF/C.2/3).

Mr. DE JONG (Netherlands) said he was against any formula involving the number of crew which he felt would add a further difficulty to the method of calculation.

Mr. CUNNINGHAM (USA) withdrew his proposal.

Mr. CHRISTIANSEN (Norway) requested a roll-call vote on formulae 1 and 2.

A roll-call vote was taken.

Mexico having been drawn by lot by the Chairman, was called upon to vote first. The result of the vote was as follows:

In favour of formula 1: Mexico, Netherlands, New Zealand, Philippines, Poland, Portugal, South Africa, Spain, USSR, United Arab Republic, United Kingdom, Yugoslavia, Argentina, Australia, Belgium, Brazil, Bulgaria, Canada, Czechoslovakia Federal Republic of Germany, France, Ireland, Israel, Italy and Kuwait.

In favour of formula 2: Norway, Sweden, United States, China, Denmark, Finland, Greece, India, Indonesia, Japan and Liberia.

There were 25 votes in favour of formula 1 and 11 votes in favour of formula 2.

Formula 1 was approved.

Mr. GUPTA (India) pointed out that the formula should no longer be written $GT = a_1 V$, but $GT = aV$.

Mr. DE JONG (Netherlands) said he thought the Committee should vote on whether or not to choose a constant coefficient.

Mr. KING (Kuwait) and Mr. CHRISTIANSEN (Norway) considered that the working group should study that problem.

Mr. ROCQUEMONT (France) pointed out that all the delegations supporting Proposal C were in favour of a constant coefficient; only one delegation had suggested that the coefficient should vary according to volume.

Mr. PROHASKA (Denmark) recalled that in his opinion the coefficient should vary according to the freeboard; perhaps the working group could recommend an additional parameter.

Mr. SEAGO (UK) drew the Committee's attention to graph 5 in Annex 2 (TM/CONF/3.)

Mr. CONTOGEOORGIS (Greece) considered that if the gross tonnage unit were the same for all types of ship, that would penalize some ships the characteristics of which had not been taken into consideration. Since the Committee wished to discontinue exemptions, his delegation proposed the adoption of higher coefficients for certain types of ship; in any case the gross tonnage value would have to be lower than the old value so as to make it easier for certain countries, which were anxious to safeguard their shipping industry, to ratify the Convention.

Mr. PROHASKA (Denmark) pointed out that a number of delegations had felt that the working group should be given a free hand to study all aspects of the question, so it would be better not to take any decisions for the time being. He also reminded the Netherlands representative that displacement was not the only parameter to be considered - there was nothing to prevent other factors from being taken into account.

Mr. PRIVALON (USSR) said it was his understanding too, that the Committee wished to set up a working group to make certain calculations which it was not itself in a position to carry out, so that it could subsequently examine the question more thoroughly. Any decision therefore seemed premature. Moreover, the working group should not have unlimited powers, but should concentrate on certain specific questions without going back over points already settled at plenary meetings of the Conference.

Mr. SEAGO (UK) agreed with the USSR representative on both points. The working group should confine itself to the question of whether the coefficient to be applied to total volume should be constant or variable.

Mr. ROCQUEMONT (France) said that his delegation, while definitely favouring a constant coefficient, was prepared to consider any suggestion which might seem more satisfactory. The Committee should, however, give the working group unequivocal instructions, indicating in particular, that the metric system should be used as the basis for its work and that if a variable coefficient was adopted, it should not be based on volume (in accordance with the decision already reached on that point).

His delegation also wanted the same coefficient to be used for all types of ship, as it felt that the Convention should make no distinction between the various types. However, since the Danish representative had announced that it was going to distribute a new document, it might be advisable to defer a decision until that document had been circulated.

Mr. DE JONG (Netherlands) said he still thought that it would be helpful to the working group if the Committee were to take a roll-call vote.

Mr. PROHASKA (Denmark) pointed out once again that the only decision taken by the Conference had been on the use of volume for calculating gross tonnage. It had neither excluded the introduction of a coefficient nor considered what effect the various formulae proposed might have on small ships. In any case, it was always entitled to reconsider a decision which it had already taken if another alternative appeared to be more suitable. He earnestly hoped that the document which his delegation would distribute the following morning would be submitted to the working group.

The CHAIRMAN suggested that the Committee should take a decision on the following four questions: should the coefficient be independent of draught, freeboard and volume, should it be independent of the crew space, should it be independent of the type of ship and finally should the metric system be used for the calculations?

Mr. PROHASKA (Denmark) remarked that to answer the third question forthwith would tie the hands of the working group and that a decision had already been taken in regard to crew space.

Mr. PROSSER (UK) endorsed the Danish representative's two comments. The working group already had all the data it required to enable it to carry out its task.

Mr. CHRISTIANSEN (Norway) thought that the working group should be given a free hand to determine the coefficient to be used in the formula selected.

Mr. GUPTA (India) shared the view of the representatives of the United Kingdom and of Norway. Since all the delegates who would constitute the working group had taken part in the current discussion, there could be no possibility of any misunderstanding.

Mr. PROSSER (UK) supported by Mr. PRIVALON (USSR) stressed that the working group would have to consider itself bound only by the decisions taken in plenary.

Mr. PROHASKA (Denmark) pointed out that the Conference had decided that the parameter to be used for gross tonnage should be the volume multiplied by a factor which would make it possible to arrive at values as close as possible to existing values.

Mr. CHRISTIANSEN (Norway) added that the Chairman had stressed in plenary that the Committee had "envisaged the possibility of applying other parameters in addition to the main parameters" (TM/CONF/SR.6, p.3).

The CHAIRMAN, noting that the majority of members preferred to leave the working group completely free to study all the aspects of the problem, proposed that its terms of reference

should be to make a study of how, in formula $GT = aV$, the coefficient a should be determined so as to ensure that the values obtained would be as close as possible to the existing values.

It was so decided.

The CHAIRMAN invited the Committee to examine the two formulae which had been proposed for net tonnage, namely

$$1. \quad NT = a_1 D + a_2 P - a_3 WB \quad \text{and}$$

$$2. \quad NT = b_1 D + b_2 f(m) - b_3 WB$$

where

D = displacement

P = volume of passenger space

n = number of passengers

WB = volume of water-ballast space.

Mr. ROCQUEMONT (France) said that his delegation, in line with its policy of simplification, considered that the displacement factor alone should be retained. It was clear that the omission of passenger spaces would handicap passenger ships, but since there were fewer and fewer such ships the drawback would not be so great. Moreover, if it was necessary to take account of the volume of passenger space, the gross tonnage as defined would meet that purpose. He reserved the right to revert to the question of water ballast at a later stage.

Mr. PROHASKA (Denmark) recalled that the United States representative, having stressed that the question of water

ballast had been studied by the Sub-Committee on Tonnage Measurement, had expressed the view that water-ballast space should be included in gross tonnage; there was some doubt, however, whether that solution would make it easier to obtain values as close as possible to existing values and that was a point that the working group should examine. The French representative had no doubt been right in stressing that, since the number of passenger ships was decreasing, no great harm would be done by omitting passenger space; but there were still many of them in existence and an excessive reduction of their tonnage would not serve the interests of shipowners. The Working Group should not overlook that aspect of the problem. Finally, the Danish delegation felt that the number of passengers should be taken into account; thus, it would prefer to see formula 2 adopted on the understanding that the certified number could mean only the maximum number of passengers which that ship could carry.

Mr. STITT (USA) said his delegation considered that it was essential to retain both the water-ballast space and the data - space and number - relating to passengers.

Mr. GUPTA (India) asked the United States representative to explain how his country dealt with water-ballast space.

Mr. STITT (USA) said that, in accordance with the regulations in force in his country, that space was included in the ship's gross tonnage and excluded from its net tonnage, provided that the water ballast space concerned was really essential.

Mr. SIMPSON (Liberia) said that the same rules were applied in his country as in the United States. His delegation could not accept any tonnage measurement system which did not exclude passenger space and water-ballast space.

Mr. ROCQUEMONT (France) said that the French delegation could not approve a proposal whereby displacement would be corrected by water-ballast space. It had been stated that in most systems, and particularly in the United States, that space was not excluded from gross tonnage but was deducted when net tonnage was calculated, and a continuation of that system had been advocated. That precedent could not be invoked however, since displacement was not the same thing as the present net tonnage. It was only for convenience that the term "net tonnage" had been used. In fact, shipowners used liquid ballast to give the ship stability and to increase its earning capacity. There was therefore no reason why the water-ballast space should be deducted. Why should liquid ballast and not solid ballast be deducted when some ships were ballasted with kentledge? It had been rightly observed that the concept of water ballast could lend itself to different interpretations. The United States representative had answered that it was a question solely of "essential" water ballast. It would, however, be difficult to define what was essential water ballast. The French delegation proposed that the formula for net tonnage should be based exclusively on displacement without any deduction for water-ballast space.

Mr. CHRISTIANSEN (Norway) pointed out that his country was a Party to the Oslo Convention, and in the course of several meetings, at which the signatories had discussed the question of water ballast, Norway had proposed the adoption of the rules followed in the United States, under which the water-ballast space was included in the gross tonnage and omitted from the net tonnage. There was no difficulty about defining those spaces. The rules which were applied both in the United States and by the signatories of the Oslo Convention were very strict and had never caused difficulties.

Mr. PROHASKA (Denmark) pointed out that water-ballast space might be indispensable for some ships, for example to balance fuel. The construction of water ballast tanks was costly, because it sometimes involved increasing the size of the ship. It was therefore reasonable that the owner should receive some compensation. For solid ballast, no compensation was necessary.

Mr. MUENCH (Israel) thought the Committee should not take any decision on equations 1 and 2 until the Working Group had considered the question. Stress had been laid on the fact that the adoption of the displacement concept ought to make it possible to produce figures close to those of present tonnages. But the Committee did not know what figures would be arrived at if the water-ballast space was deducted. It would therefore be preferable for the Working Group to make the necessary calculations, after which the Committee would be able to take a decision in full knowledge of the facts.

Mr. GUPTA (India) agreed that water-ballast spaces were necessary to certain types of vessels. If those spaces were to be deducted, there would have to be a uniform method for calculating them, to avoid giving an advantage to certain types of ship. There were of course some ships which had a ridiculous tonnage because they had huge water-ballast spaces. Moreover, it was difficult for the port authorities to discuss with owners the conditions necessary to ensure the safety of a ship. When the Working Group came to consider the question, it would have to work out a system which would prevent that parameter from being used to produce great variations in tonnage between different types of ship.

Mr. RUSSEL (South Africa) said he had been under the impression that the certified displacement did not include the water-ballast space. If that were the case, he wondered why there should be any question of excluding them.

Mr. WILSON (UK) held the same view as the representative of Israel. The question of deducting the water-ballast space from the net tonnage based on displacement had not been considered. Before taking a decision, the Committee should know what the effects of that deduction would be. The same was true of passenger spaces.

Mr. ERICSSON (Sweden) stressed the need to prevent shipowners from using the new regulations for the purpose of calculating a lower tonnage, for example, by using water-ballast spaces for transporting oil. From that point of view, the positioning of tanks on ships might be of great importance and the question merited study.

Mr. DE JONG (Netherlands) said there were at present three systems of tonnage measurement. If a universal system was the aim, the tonnage certificate must relate to the total volume, the displacement, the total volume of water-ballast spaces and the total volume of passenger spaces.

Mr. ROCQUEMONT (France) pointed out that the certified displacement would be determined at the ship's summer load-line.

Reference had been made to the interaction between the various conventions and, in particular, the Convention for the Prevention of Pollution of the Sea by Oil. That Convention had been drawn up in 1954 and revised in 1962. Amendments had been proposed in 1968 and there was a question of further amendments. The French delegation was of course against pollution of the sea, but considered that that question, and more particularly the question whether a ship should have water ballast tanks separate from its fuel bunkers should be contained in the Convention mentioned. In the future tonnage measurement system it was not appropriate to raise matters relating to the fight against pollution. That would be a dangerous precedent.

It was of course desirable to come back to figures close to the present tonnages, but that was a secondary consideration, especially where net tonnage was concerned. It was a point which should not be taken into account.

Mr. ERICSSON (Sweden) also considered that the new certificates should be used by all countries and also by the Suez Canal authorities, and if the Conference wished to help those authorities to use the new certificates, it would be

better not to include the water-ballast spaces in the net tonnage. The certificate should indicate the total volume and the displacement with or without the water-ballast spaces.

Mr. PROHASKA (Denmark) wondered whether the water-ballast spaces should be deducted in their entirety. It was questionable whether the deduction of the whole of those spaces would make it possible to arrive at figures close to the existing values, but the United States representative had, a few days previously, suggested a formula which would make possible an automatic limitation of the deduction.

Mr. SABET HABACHI (Suez Canal Authority) said that, under the Canal regulations, water-ballast spaces outside the hull were not included in the tonnage, but all spaces within the hull were included in the gross tonnage. Indeed, the Constantinople Convention prohibited the exclusion of anything situated within the hull.

Mr. GRUNER (Finland) asked for the addition to the proposed equation of the term "-IR (ice-reinforcement)".

The CHAIRMAN proposed that the working group should be instructed to seek a formula for net tonnage using the parameters of displacement, volume of passenger spaces or number of passengers, volume of water-ballast spaces and ice reinforcement. The working group would consider those various factors and would propose a formula by which it would be possible to obtain net tonnages as near as possible to the existing tonnages.

It was so decided.

Mr. ROCQUEMONT (France) felt he should make it clear that he was not convinced by the various arguments which had been advanced, and in particular with reference to ice reinforcement. He was afraid that the way might thus be opened for further deductions, which would make net tonnage quite meaningless.

Mr. CHRISTIANSEN (Norway) wondered whether it would not be better to set up two working groups, one for gross tonnage and the other for net tonnage.

The CHAIRMAN feared that would be difficult.

Mr. NADEINSKI (Executive Secretary) said that if two working groups were set up, only one of them could be provided with simultaneous interpretation; the other would have to meet, without interpreters, in the Berners Street premises.

Mr. PROHASKA (Denmark) suggested proceeding forthwith to set up a single working group, composed of representatives of Norway, the Union of Soviet Socialist Republics, the United Kingdom and the United States. Japan might be invited to be represented if it so desired.

Mr. NOZIGLIA (Argentina) proposed that France also should be represented.

Mr. GUPTA (India) considered that every country should be allowed to send a representative if it so desired.

The CHAIRMAN confirmed that every delegation had the right to participate in the working group.

Mr. PROHASKA (Denmark) maintained that only a very small group would be able to do useful work.

Mr. MURRAY SMITH (UK) did not think that a limit could be set to the number of delegations represented in a working group whose conclusions would be of great importance to all countries. He considered moreover that to be able to study the question of net tonnage, the working group would require more precise terms of reference and thought that the Committee ought to devote further time to that point.

Mr. GUPTA (India) shared the view of the United Kingdom representative. The discussion should be taken up again the next morning.

Mr. DE JONG (Netherlands) thought the Committee would be unable to make useful progress until the Working Group had submitted its conclusions. It would therefore be better for the Working Group to meet the following morning, while the Committee would begin consideration of Proposal C. The important thing was to reach solutions that would be acceptable to all, including the Suez Canal and Panama Canal authorities.

Mr. BORG (Sweden) agreed with the United Kingdom representative that the terms of reference given to the Working Group on the question of net tonnage were not sufficiently precise to enable it to reach satisfactory conclusions.

The CHAIRMAN proposed that the discussion should be continued the following morning.

It was so decided.

The meeting rose at 6 p.m.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE NINTH MEETING

held at Church House, Westminster, London, S.W.1,
on Thursday, 5 June 1969, at 9.40 a.m.

Chairman:	Mr. F. SPINELLI (Italy)
Secretary:	Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference (TM/CONF/WP.3; TM/CONF/6, Corr. 1 and Add. 1; TM/CONF/9/Add.1; TM/CONF/C.2/WP.5 and Corr. 1, WP.6, WP.8, WP.9 (continued)	3

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED BY THE CONFERENCE (TM/CONF/WP.3; TM/CONF/6, Corr. 1 and Add. 1; TM/CONF/9/Add.1; TM/CONF/C.2/WP.5 and Corr. 1, WP.6, WP.8, WP.9 (continued)

The CHAIRMAN invited the Committee to consider the question of the terms of reference to be assigned to the working group, starting with those relating to the agreed formula for the calculation of gross tonnage, i.e. $GT = aV$.

In connexion with the coefficient "a" in that formula, he would recall that, in accordance with decisions already taken by the Conference, gross tonnage would not be subject to change in line with changes in displacement. Secondly, he had been given to understand that there had been second thoughts on the part of some delegations regarding the decision taken the previous day to take no account of crew space in the gross tonnage formula.

Mr. MURPHY (USA) explained that the decision in question was a matter of concern to his delegation. Certain considerations fundamental to the developing of a valid and workable tonnage measurement system seemed to have been left out of account. Under the decision, shipowners desirous of providing additional amenities for the crew (advisable for attracting the right kind of seaman) would be penalised by higher charges throughout the whole life of the ship. Several proposals had been made to cover the point, the major objection to which had been the difficulty inherent in defining the spaces concerned. That difficulty would be largely avoided by using a formula providing for a simple deduction from gross tonnage for crew space provided in excess of the standard volume, and defining crew

space as the actual volume of sleeping, eating and recreation rooms. That was the solution his delegation would prefer and he would accordingly move that the Committee reconsider the decision with a view to discussion of the new proposal.

The CHAIRMAN said that, under rule 26 of the rules of procedure, permission to speak would be accorded to one speaker supporting the motion and two opposing it, after which the motion would be put immediately to the vote.

Mr. GUPTA (India) strongly supported the motion, since the new proposal would help to minimise the special problem of crew accommodation for ships plying in Eastern waters.

Mr. ROCQUEMONT (France) opposed the motion on two grounds: that the arguments adduced by the United States had been thoroughly canvassed in the previous discussion, and that time was short for completion of the work.

Mr. BOLTON (UK) also opposed the motion. It should be left to other bodies to deal with problems extraneous to tonnage measurement.

The motion was rejected by 17 votes to 12.

The CHAIRMAN outlined the terms of reference for the working group respecting gross tonnage measurement, as emerging from the decisions already taken. The coefficient "a" would be constant or variable but if variable should be the function of volume only and not of displacement, draught or freeboard.

Mr. PROHASKA (Denmark) pointed out that no decision had been taken on the question of freeboard, and asked for an opportunity to be given him to introduce the working paper coming out in his delegation's name (TM/CONF/C.2/WP.10) as soon as it was available.

The CHAIRMAN reminded the Danish representative that, in accordance with Rule 23 of the rules of procedure, discussion of his delegation's paper could not take place until the next day.

Mr. PROHASKA (Denmark) explained that the paper in question was meant to help the working group in considering other parameters, in line with Conference decisions, on which the non-constant coefficient "a" would depend. After recapitulating his arguments on penalising safety, he asked that the paper be considered at the earliest possible moment and, in the meantime, that it be passed to the working group for its information.

Mr. PRIVALON (USSR) said that his delegation shared the Chairman's concern about the slow progress in the work and would call for more strict application of the rules of procedure.

The provision on gross tonnage measurement was not designed to be a criterion for the levying of port dues, so that the introduction into the formula of a function of displacement, draught or freeboard would not serve the intended purpose and might, indeed, conflict with that purpose as enunciated eventually by the General Committee in accordance with the instructions given at the second Plenary meeting. Moreover, safety matters from the navigational standpoint were the concern of the International Load Line Convention.

In the circumstances, he would propose that the working group be asked to study and report on the factor, constant or variable, to be used for the coefficient "a" in the formula, which would produce figures as near as possible to existing gross tonnages. In doing so, there was no need to take into account draught, displacement, vessel type or any other parameter than that of total volume.

The CHAIRMAN proposed to put to the vote the following terms of reference for the Working Group respecting gross tonnage measurement: to study the formula $GT = aV$ with a view to arriving at a value, constant or variable, for the coefficient "a"; if variable, the value should be the function of total moulded volume of ship, but not of displacement, draught or freeboard.

Mr. PROHASKA (Denmark) speaking on a point of order, said that the terms of reference, as thus conceived, would fail in the object of arriving at a formula that would produce figures as close as possible to existing gross tonnages. In particular, ships operated permanently as open shelter-deckers would be heavily penalized in gross tonnage; to avoid that consequence, a corrective factor would have to be introduced.

Mr. ROCQUEMONT (France), also speaking on a point of order, pointed out that the suggestion just made was in contradiction with the decisions already taken and was therefore out of order, even for consideration by the Working Group.

The terms of reference outlined by the Chairman were approved by 27 votes to 7.

The CHAIRMAN recalled the tentative agreement that, in the case of net tonnage measurement, the Working Group should be asked to study the following alternative formulae:

$$NT = a_1 V$$

or

$$NT = a_1' V + a_2' P$$

or

$$NT = a_1'' V + a_2'' P - a_3'' WB$$

$$\text{with minimum } NT = (a_1'' V + a_2'' P) K$$

where V = displacement at the assigned summer load line

P = volume of passenger spaces or function of number of passengers

WB = volume of water-ballast spaces

$a_1, a_2,$ and a_3 = coefficients which might be constant or variable

K = a constant

A last-minute proposal had been made that the effect of increased weight due to ice strengthening construction should also be taken into account in the formula. He proposed putting that issue to the vote immediately.

The proposal was rejected by 20 votes to 4.

The CHAIRMAN asked whether there was any objection to the tentative terms of reference as they now stood.

Mr. KLEINBLOESEM (Netherlands) said that, following the Committee's decision that the new parameter to be introduced under the old name of "net" was to be based on displacement, he felt it was only fair to submit his comments as a member of the Netherlands delegation representing both his direct employer, the Rotterdam Pool Management, and all the Netherlands ports including Amsterdam. He was sure that his views would be shared by many other port authorities in countries both in and outside Europe.

There were at present many due-collecting authorities throughout the world whose rates were of less importance to the shipping industry than the charges of private concerns such as stevedoring companies. Port authorities were among the few who still used the present gross or net tonnage figures as parameters for their rates. There was, however, a strong move away from both figures, due to the existence of many different systems of measuring ships, and also to the fact that there were so many distortions. For example, a disbursement account at the port of Rotterdam would contain some 20 different items, such as state pilotage, harbour pilotage, towing, harbour dues and agency fees, of which only two were based on gross or net register items. For those

two items, the agency fee, which was a private charge, and the harbour due which was a municipal tax, the tonnage figures were only one of several parameters used to ascertain how much the ship would have to pay.

As far as he could recall in 23 years' experience in the port industry, port authorities had never been happy with the state of affairs, and particularly the convertible open or closed shelter-deck system which they had accepted only reluctantly. As long as certificates could be changed and tonnage openings could be closed or opened, there was little the port authorities could do. But since IMCO's introduction of the dual tonnage mark system, port authorities had been compelled to act. The Conference in Plenary Session had decided to abolish that system. While he welcomed the decision, it should be realized that by introducing that scheme IMCO had triggered off a new development among port authorities, who had been forced to find new ways and means of countering the scheme. Their success had made them reconsider the fundamentals of port pricing policies, and they were waiting to see whether the Conference would produce any useful results for them. If not, they would have to rely on other data than the tonnage certificate.

The discussion of the second parameter at the previous meeting had turned in the direction of re-introducing in the formula a number of plus or minus items, such as passenger spaces and water ballast, and efforts were once more being made to open the door to every possible kind of deduction or exemption, as for example, ice strengthening. Rotterdam

had been using gross tonnage for harbour dues for longer than he could remember. Those port and other dues collecting authorities and private companies which based their service charges on net tonnage would never use the new net figures; they would change over to gross, regardless of any recommendation that IMCO might make. If an effort was made to introduce the open shelter-deck concept as well into the gross figure, he was sure that that parameter, too, would be abandoned for the purpose of collecting dues and other charges.

The aim of this Conference was to find a system for measuring ships that could be applied by all the countries of the world, whether or not they were big shipping nations at the present time. There was a further aim, namely to find a system that would be readily and widely acceptable for as many purposes as possible, due collection being only one of them - a system which by its nature would induce port and other due collectors to return to tonnage certificates. Such a system would have to produce parameters and show them on a certificate in such a way that for each particular purpose all parties concerned could find the items they needed in the document. He emphasized, therefore, what the Netherlands representative had said on a number of occasions: the certificate should at least show total volume, total displacement, total passenger space and total water ballast.

Mr. ROCQUEMONT (France) maintained that, as for gross tonnage, the Working Group should be given a precise mandate on the matter of the net tonnage formula. To include consideration of the coefficients a_2 , a_3 , b_2 and b_3 would be tantamount to concluding that the Committee had decided to introduce terms for passenger space or number of passengers and for water ballast while it had, in fact, so far made no such decision. He observed that the six French autonomous ports agreed with the representative of the Netherlands Port Authorities that a tonnage formula should not be liable to divergent interpretations; water ballast was, however, notoriously difficult to define and corrective measurements to allow for passengers only tended to complicate the issue. He therefore urged the Committee to close the debate by taking a distinct decision on the net tonnage formula.

Mr. FILIPOVICH (USSR) agreed with the French delegation that the Working Group should receive definite instructions; unfortunately, however, such concepts as the displacement in the net tonnage formulae had, by no means, so far been clarified. It had been stated that displacement was to be taken to the summer load line, but that was not a clear-cut value since it could depend on several parameters unconnected with the size of the ship or on various sets of regulations, or, yet again, could be chosen by shipowners at their own discretion up to a set limiting value. Furthermore, the matters of defining water ballast and of making allowances for small ships had so far been left open. If the Working Group were to be expected to submit concrete proposals all parameters had first to be carefully defined.

The CHAIRMAN recapitulated that it had been agreed to define displacement at the maximum displacement a ship could have on summer freeboard; if, for scantling reasons, the ship did not have full draught in accordance with the Load Line Convention, then displacement would be related to the scantling draught. For a ship without a load line, a value of 85 per cent of the depth had been suggested but no final decision had been reached. For passenger ships the displacement should be taken to the deepest subdivision load line. Some formula had to be adopted which would ensure that the figures listed in the tonnage certificate would not change frequently.

The definition of water ballast to date was less clear; one possibility was to take water ballast to mean the volume of all those spaces which were defined as such according to United States regulations for exemption from both gross and net tonnage and which the Conference had decided to exempt in the net tonnage measurement only. It had also been suggested that slop tanks should be considered as water ballast tanks.

Thirdly, the coefficient before the displacement term in the formulae had to be such as to take into account the size of the ship, but no agreement had so far been reached on which particular function to adopt.

Mr. ROCQUEMONT (France) felt that the Committee was unduly complicating the issue. In the case of most ships, the load line was changed only infrequently and so displacement could be simply defined as displacement up to the summer load line assigned to a particular ship by virtue of the freeboard allocated to it by the tonnage measurement authorities after discussion with the shipowners.

Mr. MUENCH (Israel) recalled that the treatment of water-ballast spaces was one of the main differences between the United Kingdom and United States tonnage measurement systems. He had understood that it was agreed in the Sub-Committee on Tonnage Measurement that if water ballast was to be included in gross tonnage, it should at least be exempted from the net tonnage formula. However, as net tonnage was to be based on displacement he felt that this was already taken into account.

Mr. CHRISTIANSEN (Norway) maintained that net tonnage should be in terms of volume.

Mr. DE JONG (Netherlands) observed that in effect it was unimportant whether displacement were calculated on a volume or a weight basis but that for practical reasons it was easier to calculate it as a volume, without having to take into consideration the specific gravity of water. His delegation favoured the idea of inserting water-ballast spaces as an extra figure in the tonnage certificate so that it would be easy for ports to apply water ballast exemptions if they so wished.

Mr. GUPTA (India) pointed out, firstly, that in the case of an ordinary ship floating at its summer load line the water-ballast spaces in both the double bottoms and the wing tanks would be empty, so that any allowances then made for water-ballast spaces would mean deducting a quantity which had never been included. Secondly, if Archimedes' principle of displacement being proportional to weight were to be used, the water-ballast spaces would be irrelevant anyway.

The CHAIRMAN noted that, for instance, an oil tanker with large water-ballast spaces would be greatly affected by the exemption or non-exemption of those spaces in the net tonnage formula.

Mr. PROSSER (UK) cautioned that the Committee was at a very difficult stage in its deliberations. It should, firstly, take care to ensure that it did not adopt a final gross tonnage formula based on volume which, although acceptable to a majority of countries was yet unacceptable to that minority of countries having a majority of ships, and, secondly, should refrain from restricting the terms of reference of the Working Group too closely on the subject of a net tonnage formula. While the United Kingdom delegation, itself, favoured the volume concept for displacement, it nevertheless preferred that the Working Group should be free to examine solutions based on all other concepts as well.

Mr. BONN (Canada) said that he fully supported the United Kingdom representative's comments. At the present juncture the Committee should be careful to view all possible parameters to be considered in arriving at net tonnage.

Mr. WIE (Norway) said that his delegation shared the concern expressed by the United Kingdom representative. He was disturbed at the Committee's slow progress. The divergence of opinion was shown by the fact that it had just taken a vote on the terms of reference of the Working Group which reversed the decision taken at the previous meeting.

It had been pointed out that there were two trends of opinion, one backed by the majority of members of the Committee, the other supported by countries representing the majority of existing merchant fleets. The Conference was not a contest between two teams. One side might win the first round but both might lose in the second. It would be regrettable if the Conference produced results that were not accepted by the majority of countries and of existing shipping interests. A Convention that might never be ratified, or only ratified after 20 years, would be useless. Unless the Committee could produce a solution

that was acceptable to the Plenary Meeting it would have achieved nothing.

The CHAIRMAN appealed to representatives to take heed of the Norwegian representative's comments in the interests of the Committee's work and the success of the Conference.

Mr. HABACHI (Observer, Suez Canal Authority) speaking at the invitation of the Chairman, said that it was essential to define the meaning and the location of water ballast. Bona fide water ballast had been mentioned in the discussions, but its meaning was far from clear. For example, for a supertanker moving through the Suez Canal 20,000 tons of water ballast would be two thirds of the ship's volume, which was not reasonable. The Netherlands representative had made an interesting suggestion that an additional page should be incorporated in the certificate indicating all spaces not included in the tonnage, and each authority could use it to suit its own purposes.

Mr. MURPHY (USA), replying to a question by the representative of Israel, said that his delegation certainly considered that the question of water ballast was still a problem and would have to be considered. The Committee was dealing chiefly with ships of the ore-carrying type, with heavy and inexpensive cargoes; the water ballast question was at present incorporated in most existing systems by provision enabling such ships to compete in present-day world economies. The ports representative in the Netherlands delegation had made an interesting point, but it raised the question of what the Conference was trying to do. As he understood it, the aim was to simplify and unify the tonnage measurement rules and

eliminate any factors detrimental to safety. The current economics of industry were irrelevant. The ports authorities should be concerned lest any changes made it uneconomic for ships to use their ports and resulted in goods being transported by other means. The aim should be to remain as close as possible to existing gross and net tonnages. Ports authorities could adjust their rates so as to obtain the funds they needed; but IMCO must obtain equitability between existing types of ship without affecting the existing economic situation. He strongly supported the suggestion that all the parameters mentioned as affecting the situation should be considered by the Working Group, which should be instructed to seek solutions as near as possible to existing ones. He agreed with the Norwegian representative that if a satisfactory solution were not found the Conference would have failed in its task and the repercussions would be serious.

Mr. DE JONG (Netherlands) said that he did not share the United States representative's concern over the possibility of ships being prevented from using ports by unduly high charges. The Netherlands shipowners saw no dangers in Proposal C because they did not expect their ports authorities to be unreasonable: whatever the system, rates would have to be adjusted without being disadvantageous to ships. He saw no reason why the Committee should not approve Proposal C as it stood.

In any case, the time had come for a decision. The Committee could continue to seek a solution close to the system under Proposal C - total volume plus displacement - in the knowledge that the majority of countries and ports authorities would agree, but that the owners of the major part of the world merchant fleets would not. That would be taking a chance. Alternatively, it could adjust tonnage so that the open shelter-deck concept was maintained for gross tonnage, with reduction of water-ballast spaces for net tonnage.

There was also an intermediate method. Acceptance of Proposal C would entail a transition period of between 10 and 15 years; but there was nothing against immediate acceptance of a unified system close to the existing system and keeping the open shelter-deck concept for gross tonnage and the deduction of water-ballast spaces for net tonnage, and applying it for all new ships during the transition period, while allowing existing ships to keep their tonnage. After 15 years a decision could be made on whether or not to change to total volume and displacement only.

Mr. CHRISTIANSEN (Norway) said that the Netherlands representative was out of order in speaking of certification and of Proposal C when the Committee was discussing parameters for gross and net tonnage.

His delegation fully supported the views of the United States representative.

The CHAIRMAN appealed to representatives to confine their comments to the question whether the working group should be free to discuss three parameters for the net tonnage formula or only two. In the former case, he suggested that the working group should divide into three groups, but under the same

Chairman, each to discuss one of the parameters for net tonnage; a coefficient plus displacement; a coefficient plus displacement and with or without passenger space; a coefficient plus displacement, with or without passenger space; a coefficient plus displacement, with or without passenger space and minus water ballast.

He suggested that the working group should be composed of the following countries: Denmark, France, Federal Republic of Germany, Italy, Japan, Netherlands, Norway, Spain, Sweden, USSR, UK and USA, and that the Chairman should be Mr. Ericsson (Sweden).

It was so agreed.

The CHAIRMAN invited members of the Committee to consider which of the regulations in Proposal C (TM/CONF/6) should be discussed by the Committee. He suggested that the Committee should discuss regulations 1, 2 and 3 after the working group had completed its task, but that the Committee should consider regulations 4 (the problem of frequent changes in tonnage), 5, 6(2) (open and closed spaces), 7(1) and (2) (leaving open the problem of weight or volume) and 8.

It was so agreed.

The SECRETARY, referring to Article 4(1)(b) on page 14 of Proposal C, pointed out that the General Committee had asked the Committee to decide on the overall length limit, at present 15 metres, and also on a definition of overall length for inclusion in Article 2.

The CHAIRMAN recalled that it had been suggested that the definition of overall length in the International Load Line Convention should be used.

Mr. PROHASKA (Denmark) drew attention to the following corrections in the formula for gross tonnage (TM/CONF/C.2/WP.10): in the first paragraph the penultimate word in the fourth line should be "refrigerated" and the eighth word in the eighth line should be "judged"; in the last paragraph on page 2 the penultimate word in the second line should be "assigned"; and in the first paragraph on page 3 the word "these" should be inserted before the word "ships".

The meeting rose at 12.15 p.m.



IMCO

FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE TENTH MEETING

held at Church House, Westminster, London, S.W.1,
on Thursday, 5 June 1969 at 2.30 p.m.

Chairman: Mr. F. SPINELLI (Italy)

Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W. 1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (continued)
(TM/CONF/6; TM/CONF/C.2/2)

Article 4, paragraph (1)(b)

The CHAIRMAN reminded the Committee that the amendment proposed by Sweden to Article 4 (TM/CONF/6), which would substitute a length of 24 metres for one of 15 metres, was in keeping with the provisions of Article 5 of the Convention on Load Lines. At the stage which had been reached in the discussions, he suggested that the Committee should adopt that amendment in principle, subject to the possible subsequent addition of a definition of "moulded depth".

After a short discussion, in which Mr. CHRISTIANSEN (Norway), Mr. ROSELL (Denmark) and Mr. SASAMURA (Secretary) took part, it was so agreed.

Regulation 3

The CHAIRMAN pointed out that two amendments had been submitted concerning the definition of the total volume of enclosed spaces, one by the Netherlands and the other by the Soviet Union. As the latter amendment was more closely related to displacement problems, he suggested that, for the time being, the Committee should consider only the amendment submitted by the Netherlands, whilst bearing in mind that no decision could be taken on the concept of gross tonnage until the Working Group had completed its work.

Mr. ROCQUEMONT (France), summing up the situation, said that, if the Working Group were to adopt a coefficient which varied according to volume, it would then be preferable to adopt the Netherlands amendment. If, on the other hand, the Group decided to adopt a constant coefficient, it would be

preferable to express the gross tonnage in the new unit, in accordance with the original text in Proposal C.

Regulation 4

The CHAIRMAN drew attention to the fact that various amendments had been submitted - by Denmark, France, the Netherlands and the USSR. Since the amendment proposed by France was the furthest from the original text, he thought it would be proper to consider it first and decide whether the term "moulded displacement" should be used.

Mr. ROCQUEMONT (France) stated that, on the question of displacement, the simplest course was to refer to Archimedes' law: either to the weight of water displaced, which was equivalent to the weight of the ship, whatever the specific gravity of the water, or to the volume of water displaced, with a determination of the density of the salt water. He thought it preferable to calculate displacement to the outside of shell plating and not to the inside of the ship, in order to take in all the hull appendages which formed an integral part of the ship.

Mr. CHRISTIANSEN (Norway) emphasized that it was difficult for some shipowners to determine, at a preliminary stage, to what exact use a ship would be put and what load line should be assigned to it.

The CHAIRMAN did not think that presented any difficulty; the shipowner could always ask for the maximum draught, with the possibility of reducing it subsequently and obtaining a certificate for a lower draught.

Mr. NOZIGLIA (Argentina) pointed out that if the concept of moulded displacement was to be retained in Regulation 4, it would, as a consequence, become necessary to amend Regulation 7 - which related to the external parts of the hull - and he thought it advisable, for the sake of simplicity, to continue to use moulded measurements.

The CHAIRMAN thought that, in that case, it would be sufficient to adjust the coefficient by 1 or 2 per cent.

Mr. COLOVIC (Yugoslavia), referring to the second sentence of Regulation 4, said that the ships concerned were mainly fishing vessels and wondered whether, in that case, the load line in question would be the national load line or the international load line.

The CHAIRMAN thought the certificate would mention the displacement corresponding to the national or international load line and that, in the absence of both, the displacement would be determined to a waterline at 85 per cent of the moulded depth of the ship.

Mr. WILSON (UK) thought it sufficient to speak of "displacement determined to the summer load line", which could also be applied to fishing vessels.

Mr. ROCQUEMONT (France) considered that, in the case of ships with both a national and an international load line, it was the latter that should be taken into account.

Mr. NOZIGLIA (Argentina) emphasized that it should be the aim of the Convention to apply to international voyages and that therefore ships should have international certificates.

The CHAIRMAN, summing up the discussion, took note of the problem of fishing vessels which had no load line. In regard to the French proposal, he said that if the ship had an international load line, it was that line which should be taken into account; if the ship had two load lines (national and international), the international line should be taken into account; if the ship had only a national load line, it was naturally that line which was taken into account; lastly, if it had no load line, the displacement should be determined to a water line at 85 per cent of the moulded depth of the ship.

Mr. ROSELL (Denmark) shared the view expressed by the Chairman. Moreover, he was in favour of using "moulded displacement". He wondered whether there would be different coefficients for wooden ships and for steel ships.

The CHAIRMAN remarked that the coefficient would be only an approximation and that the difference would not be appreciable.

Mr. MURPHY (USA) said that he also was in favour of using "moulded displacement" but what was needed in the first part of Regulation 4 was a definition of displacement.

The CHAIRMAN noted that displacement must first be defined and that the Committee was provisionally in favour of using "moulded displacement".

Mr. FILIPPOVICH (USSR) pointed out that, until the Committee had decided on the term of validity of certificates, the first sentence of paragraph (2) of the French amendment served no purpose. Moreover, a reference to "national load lines" would have to be included in the regulations later on, with a statement to the effect that it applied only to ships which were not covered by the 1966 Convention.

Mr. WILSON (UK), referring to "moulded displacement", said that Regulation 7 would have to be studied in detail and that Regulations 4 and 7 should be considered together.

Mr. ROCQUEMONT (France), in reply to the comments of the USSR representative on the first paragraph of the French amendment to Regulation 4, observed that his delegation was striving for the maximum simplicity possible; changes resulting in lower displacement should be as few as possible but there was no limit on changes resulting in higher displacement.

As to whether it was better to see "moulded displacement" or "total displacement", as proposed in Regulation 7, he considered that total displacement was preferable since it would enable the form of future ships, as yet unknown, to be taken into account. The use of either mass or volume could be chosen, provided the density of the displaced water was determined.

Mr. ter HAAR (Netherlands) pointed out that for ships for which no load line had been assigned, displacement should be determined to a waterline at 85 per cent of the moulded depth. It was therefore necessary to know exactly what the moulded depth represented - a point that had been raised also by the Yugoslav representative.

The CHAIRMAN, summing up the discussion, took note of the problem of the definition of moulded depth. He recalled that the Committee had approved certain principles on the kind of load lines to be used, and left it to the Drafting Committee to prepare a suitable text on that point. Finally, he pointed out that it was necessary to define exactly what was meant by "upper deck".

Mr. WILSON (UK) suggested that, in order to avoid having to define the meaning of "upper deck", the Committee should see what definition was given in the Convention on Load Lines.

Mr. ROCQUEMONT (France) considered that that was a quite minor point, for the ships in question - namely, those engaged on international voyages and not having an international load line certificate - did not come under the 1966 Convention but would come under the 1969 Convention. Very few ships would thus be affected.

Mr. COLOVIĆ (Yugoslavia) said that the only ships concerned were fishing vessels and pleasure craft.

Mr. ter HAAR (Netherlands) thought that if a reference to the freeboard deck as defined in Regulation 3 of the Convention on Load Lines could be introduced into Regulation 4, the point raised by the representative of Yugoslavia would be satisfactorily met.

Mr. ROSELL (Denmark) said that in the case of fishing vessels with two decks and without an international load line, it might perhaps be left to the discretion of port authorities to choose the deck from which to measure displacement.

Mr. BECKWITH (Liberia) was not in favour of that solution. He suggested using the definition in Regulation 3 of the Convention on Load Lines, so modified as to refer to the uppermost complete deck instead of the freeboard deck.

Mr. ROSELL (Denmark) pointed out that in the fishing vessels to which he had referred, freeboard was measured from the second deck, and if displacement were measured from the upper deck the resulting tonnage figure would be too high.

Mr. WILSON (UK) said he appreciated the difficulty mentioned by the Danish representative, for if, under normal circumstances, the freeboard deck had to be the uppermost deck, according to IMCO regulations, that deck could not be used to assign load lines to fishing vessels with large hatchways that had to be open in all weathers.

Mr. BONN (Canada) drew the Committee's attention to subdivision displacement which was used in preference to form freeboard.

The CHAIRMAN was of the opinion that that formula, which was moreover the one set out in paragraph 2 of the amendment proposed by Denmark to Regulation 3, might well be adopted.

Mr. ROCQUEMONT (France) considered that his delegation's proposed amendment to Regulation 4 provided a solution to the problem under discussion for a ship could have only one load line irrespective of whether it had been assigned a form, scantling or subdivision freeboard.

Mr. WILSON (UK) remarked that, on the contrary, some ships did have two load lines according to whether they were used for cargo or passenger transport. It was his view that displacement should be calculated to the highest load line.

Mr. GUPTA (India) stated that such was the case for Indian ships which carried pilgrims for four months of the year and cargo the rest of the time, which made it necessary for them to change their load line twice a year. Special provisions should be drawn up for such ships.

Mr. FILIPPOVICH (USSR) considered that the purpose of Regulation 4 was to define displacement, in conjunction with Regulation 7. The problem just raised could be better dealt with in other regulations of the Convention.

The CHAIRMAN reminded the Indian representative that the concept of a change in tonnage according to draught was to be retained for existing ships. In reply to the representative of the Soviet Union, he emphasized that the Committee's immediate concern was to approve principles; the form of which the various regulations would be presented would have to be determined later.

He therefore suggested that Regulation 4 should begin with a definition of displacement as given in paragraph (1) of the Danish amendment to Regulation 3, which would be followed by a paragraph relating to passenger ships based on paragraph (2) of the same Danish amendment; then would come provisions concerning the definition of moulded depth and load line displacements, the latter being based on paragraphs (1), (2) and (3) of the proposed French amendment to Regulation 4.

Mr. SASAMURA (Committee Secretary) read out paragraph 2 of the French amendment, in the English text of which the words "displacement corresponding to the new" were to be inserted between lines 6 and 7.

The Committee approved the text of this paragraph in principle.

Mr. GUPTA (India) supported by Mr. MURPHY (USA), referring to paragraph 3 of the French amendment, spoke of the problem which would be created by the five-year time-limit in the case of passenger ships which were converted into cargo ships every year.

Mr. CHRISTIANSEN (Norway) considered that the five-year time-limit should be discussed. He also thought that the exception envisaged for changes in nationality might give rise to all kinds of manipulations.

Mr. WILSON (UK), while approving the text proposed by France, also thought the time-limit should be discussed. He considered, however, that the time-limit would not cause any problems for the vessels mentioned by the representative of India because they had two load lines and the Committee had agreed in principle that their displacement should be calculated on the basis of the higher one.

The CHAIRMAN said that that question could not be settled until the Working Group had decided whether passenger spaces should be included in the net tonnage or not.

Mr. ROCQUEMONT (France) agreed. With regard to the exception for a change of nationality, his delegation recognized that such an exception might enable the regulation to be circumvented, and it was prepared to amend its proposal.

Mr. ROSELL (Denmark) suggested that the question be referred to the General Committee.

Mr. LAWRENCE (Liberia) thought that if the exception for a change of nationality was retained, it should also apply to a change in ownership; he also considered that the term "large-scale modification" required definition.

The CHAIRMAN pointed out that a definition had been given in the amendment proposed by France to paragraph 3 of Article 3.

Mr. PRIVALON (USSR), referring to the problem of frequent changes of load line, suggested that certificates should be drawn up in such a way as to indicate to the port authorities what changes had been made previously.

Mr. ROCQUEMONT (France) agreed that the question of certificates would have to be more fully studied.

Referring to the comments made by the representative of Liberia, he said that exemption from the five-year time-limit in the case of a change of ownership would not be appropriate because the Committee already considered that the exemption in the case of a change of nationality was not sufficiently restrictive. As far as large-scale modification was concerned, it would certainly be advisable to include in paragraph 3 the definition to which the Chairman had referred.

The CHAIRMAN feared that that definition might be detrimental to ships which underwent minor modification to allow them to carry either passengers or cargo.

Mr. ROCQUEMONT (France) pointed out that if a passenger ship lost its superstructures, its depth was automatically altered by a substantial amount. The Conference had expressed a wish that tonnage changes should not be frequent and it was therefore the Committee's duty to strike a fair balance between the requirements of trade and the risks of fraud.

Mr. WILSON (UK), referring to the problem of change of nationality, said that the United Kingdom invariably re-measured every vessel registered in the United Kingdom, whatever its original flag.

Mr. CONTOGEOORGIS (Greece) objected to the text of paragraph 3 as submitted by the French delegation. It seemed unfair to prohibit a ship from obtaining a new certified displacement immediately after a change of the freeboard; the value of Proposal C lay in the fact that it replaced the system of a tonnage mark by a certified displacement, thus permitting an easier change of tonnage, but it seemed that if paragraph 3 were adopted, one of the main advantages of Proposal C would disappear.

His delegation agreed that the certified displacement should not be changed too often, but considered that a time-limit of six months would be reasonable. It also agreed with the Norwegian delegation that if the certified displacement could be altered when there was a change of nationality, many maritime powers would see large numbers of their ships passing under other flags.

The CHAIRMAN asked the French representative how the loading of the special craft mentioned in paragraph 5 could be checked:

Mr. ROCQUEMONT (France) replied that the working of international competition would make it necessary to provide regulations to restrict the loading of hydrocopters. Until international regulations were adopted, each State would have to determine the displacement of those craft when fully loaded.

Mr. CHRISTIANSEN (Norway) thought the case of special craft would have to be considered, as it seemed likely that a large number of them would come into service within the next fifteen years.

Mr. ROCQUEMONT (France), replying to Mr. GRUNER (Finland), said that the tonnage certificate of a special craft should indicate the total take-off weight authorised by the national legislation.

Mr. WILSON (UK) suggested omitting the reference to 75 kg. as the weight of each person who could be carried in the special craft, because national regulations might contain different provisions.

Mr. ROCQUEMONT (France) agreed to withdraw that figure, as it was only an incidental item in his proposal.

Mr. NOZIGLIA (Argentina) asked whether cargo submarines would be classified as special craft in regard to certifiable displacement.

Mr. ROCQUEMONT (France) said that when submerging a submarine filled its ballast tanks, and then a ballast correction could be applied. For a submarine which was on the surface, as it always was, of course, on arrival in or departure from a port, the maximum displacement on the surface was taken into consideration.

Regulation 5

Mr. ROCQUEMONT (France) proposed that consideration of Regulation 5 be deferred, because the methods of calculating displacement and gross tonnage were closely related and they could be considered together.

Regulation 6

The CHAIRMAN proposed that a small working group should be set up, composed of representatives of France, Norway, the Netherlands and the United Kingdom. The group should submit its conclusions to the Committee at its twelfth meeting.

It was so agreed.

Regulations 7 and 8

The CHAIRMAN pointed out that the Committee could not usefully consider those regulations until it knew the results of the study by the working group on coefficient "a".

The meeting rose at 5 p.m.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE ELEVENTH MEETING

held at Church House, Westminster, London, S.W.1,
on Friday, 6 June 1969, at 9.45 a.m.

Chairman: Mr. F. SPINELLI (Italy)

Secretary: Mr. Y. SASAJURA

A list of participants is given in TM/CONF/INF.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration of matters as instructed by the Conference (TM/CONF/WP.3; TM/CONF/6, Corr. 1 and Add.1; TM/CONF/9/Add.1; TM/CONF/C.2/WP.12 and WP.13) (continued)	3

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED BY THE CONFERENCE (TM/CONF/WP.3; TM/CONF/6, Corr.1 and Add.1; TM/CONF/9/Add.1; TM/CONF/C.2/WP.12 and WP.13 (continued)

The CHAIRMAN invited attention to Progress Report No. 4 (TM/CONF/C.2/WP.12), containing a summary of the results of the previous day's discussions, and to the Japanese delegation's proposal on the draught for calculating displacement in respect of ships to which the 1966 Load Line Convention did not apply (TM/CONF/C.2/WP.13). He suggested that the Committee should consider document TM/CONF/C.2/WP.12. Its decision on the minimum length and the definition of such length were set out in subparagraphs 2(i) and 2(ii) respectively. In accordance with paragraph 3, the Committee had left open the question whether, for the purpose of defining length, it should adopt the definition of moulded depth in the International Convention on Load Lines, replacing the word "freeboard" by "uppermost", so that the moulded depth would be defined as the vertical distance measured from the top of the keel to the top of the uppermost complete deck at side.

Mr. CHRISTIANSEN (Norway) said that in that case, the uppermost complete deck would have to be defined. He invited attention to his delegation's suggestion in document TM/CONF/9/Add.1.

The CHAIRMAN questioned whether it would be proper to depart from the provisions of the Load Line Convention. The Committee's decision to adopt 24 metres as the minimum length meant that for the time being it was discussing depth for the determination of minimum length. Since the decision had been made for the purpose of conformity with the Load Line Convention and to avoid two definitions, if the Committee now considered only

ships with a load line, the definition should be identical with the one in the Load Line Convention which could be referred to, without the need to repeat it. The Committee would then need only to consider the minimum length for fishing vessels and yachts to which the Load Line Convention did not apply. The question was linked with the problem of displacement which had been left open as far as fishing boats were concerned.

Mr. GRUNER (Finland) said that if the length of 24 metres was to be used solely for the purpose of identifying ships, the total length could be used and all definitions could be eliminated.

The CHAIRMAN said that the length should be the same as the length in the Load Line Convention: in other words, the load line definition of depth and freeboard deck should be retained, without being repeated.

Mr. WILSON (UK) said that in using the moulded depth it would be necessary to specify the meaning, and to which deck the moulded depth would be measured. He suggested that the first part of the definition of freeboard deck in the Load Line Convention would be sufficient if "freeboard deck" were replaced by "upper deck" and the word "normally" deleted.

The CHAIRMAN asked if the Committee would agree that for ships with load lines, moulded depth and freeboard should be defined as in the 1966 Load Line Convention, and that for ships not subject to that Convention the United Kingdom suggestion should be followed, namely, the definition of freeboard deck as in the 1966 Load Line Convention should be used, replacing "freeboard" by "upper" and deleting "normally".

Mr. ROCQUEMONT (France) said that a Convention should be self-contained; too many references to provisions in other Conventions might cause legal difficulties. The Committee and the General Committee might do well to consider the legal aspects. Where such references were essential, they should be as brief as possible, and texts from other Conventions should not be reproduced;

with identical provisions in two different Conventions, there was the risk that one of them might subsequently be changed and that difficulties of interpretation might ensue.

Moulded depth needed defining only for ships without freeboard: several of the suggestions in document TM/CONF/C.2/WP.13 were relevant. Minimum length should be the same as in the 1966 Load Line Convention, and it should be so stated.

Mr. WILSON (UK) said that his point on the need merely for a reference to the Load Line Convention had been supported by the French representative. The definition of freeboard deck also, however, referred to the owner's option to choose a second deck as freeboard deck. Had the Committee agreed that the owner would have such an option? Was the Chairman's suggestion that an owner wanting such option could have reduced draught, i.e., moulded depth measured to an assumed deck instead of to the actual upper or freeboard deck, in line with what had been previously agreed?

The CHAIRMAN explained that the present problem was merely to establish the minimum length at which the new Convention would apply. For consistency, the depth should be the same as in the Load Line Convention. The problem is not related to tonnage measurement, but only to the establishment of the minimum length at which the new Convention would apply.

Mr. LIEBENFROST (Yugoslavia) said that the definition of depth did not indicate the point at which the ship's length should be measured. He suggested using the definition in paragraph (2) on page 86 of TM/CONF/6, which provided that the moulded depth should be the vertical distance measured from the inner side of the keel plate to the underside of the deck at side: that was preferable to the definition in the Load Line Convention.

The CHAIRMAN invited the Committee to decide whether, for ships which had to comply with the Load Line Convention, the minimum for the new Convention should be the length provided in the Load Line Convention.

There were 34 votes in favour and none against.

The CHAIRMAN asked if there was any support for the idea that the same result could be obtained by using a different definition from that in the Load Line Convention.

In the absence of support for the idea, he asked if the Committee agreed, for ships which had to comply with the 1966 Load Line Convention, to wording on the following lines:

"The minimum length at which the Convention would apply should be the same as the minimum length at which the 1966 Load Line Convention applied".

It was so decided.

The CHAIRMAN suggested that the question of ships which did not have to comply with the Load Line Convention should be left until the question of displacement, which was closely connected, had been discussed.

He invited attention to paragraph (4) - total volume of enclosed spaces. The total volume was in two parts: the displacement volume, below the waterline; and everything

above the waterline. The problem was whether or not to include in displacement the appendages such as bossings and rudders, but exclude bilge keels, wells and recesses in open connexion with the sea (page 82 of TM/CONF/6) or include in the under-deck volume the volumes of bulges in the ship's side, such as a bulbous bow and propeller bossings (page 88 of TM/CONF/6).

Mr. ROCQUEMONT (France) said that since the displacement calculation was based on the volume calculation, it would be going a little far to say that the ship's volume was in two parts - the displacement volume and the volume of spaces above the waterline: the two concepts were different. If the total volume was the sum of a series of internal ship's volumes, in certain cases the deck volume would not be taken into account. Perhaps the aim was to exclude the volume of deck plating from the total volume; but displacement took into account all the structural elements up to the line from which displacement was calculated.

His delegation regarded the displacement volume as the volume of water displaced by the ship. Hence all the hull appendages would be taken into account, as in the Danish amendment.

Mr. WILSON (UK) agreed with the French representative that displacement and total volume were rather different concepts. In the case of extreme displacement, shell plating, rudder, bossings and similar items would have to be taken into account, but that was not necessary for moulded displacement.

It had already been decided that for gross tonnage, the total volume should be measured to moulded lines: thus the thickness of the upper deck plating would not be measured; the measurement would be to the inside of the boundary plating and the top of the deck to the underside of the deck ceiling. No one would

want to include normal bossings or rudders, for example, in total volume. The only bossings to include would be those with a volume; solid castings should not be included in moulded volume.

The CHAIRMAN suggested that unnecessary complications were being introduced for little gain.

Mr. STEWART (USA) said that his own authorities were working for results as close as possible to existing tonnage measurement. He supported the United Kingdom representative's view that measurement should be to the moulded line. In all shipbuilding, moulded displacement should be ascertained first. Tonnages could be determined more rapidly if the moulded volume concept were retained.

Mr. ROSELL (Denmark) agreed with the United Kingdom representative's comments on displacement and volume. He supported the deletion of "rudders" on page 82 of TM/CONF/6.

The CHAIRMAN suggested that for the time being the Committee should consider only volume and what it should contain, leaving displacement until later. The majority appeared to support the view that moulded volume should not include deck thicknesses. But would the stern frame casting be included or excluded?

Mr. ROCQUEMONT (France) said that the choice was between logic and tradition. He would favour the logical solution of moulded volume. The logical solution of moulded volume was equivalent to saying that one should only pay for the inside of an orange because one did not eat the skin.

Mr. BECKWITH (Liberia) supported the use of moulded volume. Whereas under-deck volume could be obtained from displacement curves, moulded volume must be measured physically.

With regard to the inclusion of, for example propeller bossings, the USSR amendment on page 87 of TM/CONF/6 could be used as a basis.

Mr. CHRISTIANSEN (Norway) said that his delegation had never doubted that the total volume was measured to the moulded line. The Committee was discussing details which should be cleared up in a small working group.

Mr. SOLIDA (Italy) said that the simplest solution was the moulded volume as in other conventions. In a moulded plan, the bossings would automatically be included.

Mr. GUPTA (India) agreed fully with the French stand. Displacement must necessarily correspond to the total weight of the ship in water; he would accordingly propose that, in paragraph 5(1) the word "moulded" be deleted.

Secondly, some provision should be included to cover the case of the convertible passenger/cargo ship, operating with different load lines according to the traffic of the moment.

Mr. FILIPPOVICH (USSR) said his delegation would support the Argentine view on grounds of simplicity. It should be possible to make all calculations at the design stage and accordingly calculation of displacement should be done on moulded lines.

Mr. STEWART (USA) endorsed the Soviet stand. Secondly, unlike France, he believed that moulded displacement was critical for the determining of stability.

Mr. VAN DER TOORN (Netherlands) said that he, too, was in favour of the simplest possible system. The weight of the shell plating on a ship was a completely unknown factor and it would be pointless for the intended purpose to place an arbitrary percentage value on it, however low.

It was decided, by 31 votes to 3, that the displacement should be moulded displacement.

The CHAIRMAN invited comments on sub-paragraphs (i), (ii) and (iii) of paragraph 5(1).

Mr. WILSON (UK) suggested a minor drafting change in sub-paragraphs (i) and (iii): the words "as defined by" to be replaced by the words "in accordance with". In sub-paragraph (ii), he would prefer the wording: "... to the assigned subdivision load line in accordance with ...", as possibly permitting account to be taken of fresh water or tropical allowances.

Secondly, a provision should be included to cover the case of the passenger ship that had also an assigned cargo load line giving a much deeper draught than the passenger subdivision load line. For the purpose of displacement, the higher of the two marks should be used.

Mr. ROSELL (Denmark) suggested that sub-paragraphs (i) and (ii) should be combined and in that way the last United Kingdom point would be covered. His delegation considered that sub-paragraph (iii) should be deleted, as inappropriate to an international convention. Countries could not be bound by such an instrument to apply certain national regulations.

Mr. CHRISTIANSEN (Norway) endorsed the last point made, the more so as national regulations on load line varied widely.

Mr. BECKWITH (Liberia) endorsed the amendment proposed by Denmark, with the addition at the end of the combined text of the words: "whichever is applicable". The change would also cover India's point.

Mr. GUPTA (India) saw no need for taking the deeper of the two draughts, as suggested by the United Kingdom; provision should be made for differentiation in line with actual conversion.

The CHAIRMAN observed that that point could be taken up later in considering the question of restriction on conversion.

In answer to a point raised by Mr. NOZIGLIA (Argentina), the SECRETARY explained that the usual practice concerning related international conventions was to refer simply to the convention in force, without specifying any particular year; that matter would be taken care of at the drafting stage.

Mr. ROCQUEMONT (France) asked whether the SOLAS Convention contained a definition of the deepest subdivision load line. In any event, the higher mark should be used in the case of convertible ships, for there could conceivably be cases where that mark corresponded to the cargo load line.

In sub-paragraph (iii), the better wording would be: "for ships to which a load line had been assigned under national regulations ..."; in the case of dual load lines, the deepest should apply.

The CHAIRMAN stated that the definition in question was to be found in Article 2 of the SOLAS Convention.

Mr. GUPTA (India) said that in his country there was no question of a fixed period for application of one or other of the dual load lines. Conversion was possible from voyage to voyage.

Mr. FILIPPOVICH (USSR) considered that sub-paragraph (iii) should be maintained, but in amended form for clarification purposes on the following lines: "for ships to which the International Load Line Convention does not apply but to which a load line has been assigned under national regulations ...".

In considering the question of ships with dual load lines, the case of the timber-carrying ship (deck cargo) should not be overlooked.

Mr. MUENCH (Israel) thought that the question of ships having dual load lines should be discussed also at General Committee level; the Technical Committee was not in a position to take a final decision in the matter.

Secondly, he too considered that the maintenance of sub-paragraph (iii) was essential and he endorsed the text as amended by France and the USSR.

As to sub-paragraph (iv), some countries, although not assigning a load line, set a maximum draught for certain vessels through loading regulations related to maintenance of stability. Where such statutory regulations existed, certified displacement under the Convention should be calculated according to the fixed draught limitation.

The CHAIRMAN proposed to take up the various issues that had been raised, one by one. He invited comments first on the marginal case of the timber-carrying vessel mentioned by the USSR.

Mr. FILIPPOVICH (USSR) said his delegation considered that in the case of such ships the regular load line should apply rather than the higher timber mark, since normally the ship would be carrying water ballast when loaded with timber. A contrary decision would therefore penalize the ship.

Mr. ROCQUEMONT (France) pointed out that water ballast had no relevance to the question.

Mr. CHRISTIANSEN (Norway) supported the Soviet proposal; under the International Tonnage Mark scheme the timber mark had thus far been ignored and there was no reason for any change in that situation.

The USSR proposal was accepted by 32 votes to none.

The CHAIRMAN asked whether the Committee wished in principle to retain sub-paragraph (iii).

There were 31 votes in favour of retention and 3 against.

The CHAIRMAN invited comments on the Japanese proposal (TM/CONF/C.2/WP.13), which was relevant to sub-paragraph (iii).

Mr. MUENCH (Israel) considered that the Japanese proposal was opposed in spirit to the concept of displacement. There was no need to resort to an imaginary load line; where a draught limitation existed under statutory rules, national or international, it should be used for calculation of displacement.

Mr. ROCQUEMONT (France) said he had been thinking along the same lines.

The Israeli proposal was approved in principle by 31 votes to none.

The CHAIRMAN drew attention to sub-paragraph (iii) of TM/CONF/C.2/WP.13 and to the suggestion made by the United Kingdom delegation to use the definition of moulded depth given in Regulation 3, paragraph 5(a) of the 1966 Load Line Convention, replacing the words "freeboard deck" by "uppermost deck". The latter would then take the definition assigned to the freeboard deck in paragraph (9) of that Regulation, with deletion of the word "normally", i.e. the uppermost deck would be the uppermost complete deck exposed to weather and sea which had permanent means of watertight closure.

He went on to note that such a definition would, unfortunately, encourage shipowners not to close the higher deck and suggested that it might be better not to make any stipulations about the uppermost deck.

Mr. ROSELL (Denmark), Mr. ENDO (Japan) and Mr. SOLDA (Italy) all agreed that it was not feasible to qualify the term "uppermost deck" in any way.

The CHAIRMAN concluded that in the case of a ship having no loading mark of any kind on its side, displacement would be taken as eighty-five percent of the moulded depth to the uppermost deck, the latter remaining undefined for the time being.

Change of net tonnage (TM/CONF/C.2/WP.12, paragraph 7)

The CHAIRMAN invited delegations' comments on the proposed time limit within which no change of tonnage certificate would be permitted, i.e. five years, one year or six months.

Mr. GUPTA (India) referred back to his country's problems of the "pilgrim ships" operating under the Simla Rules and carrying cargo or passengers at different times of the year, and maintained that in such cases any time limitations imposed would be completely artificial and unnecessary.

Mr. ROCQUEMONT (France), Mr. ROSELL (Denmark) and Mr. PRIVALON (USSR) held that the matter raised by the delegation of India represented a specific problem quite distinct from the question of the time limit to be imposed. Both the 1966 Load Line Convention and the 1960 Safety Convention recognized that a ship could bear loading marks for cargo and for passengers at the same time and there should, of course, be no time limitation for such ships.

Mr. VAN DER TOORN (Netherlands), supported by Mr. HUNNICH (Federal Republic of Germany), pointed out that the imposition of a five-year period within which a ship's certificate could not be changed would cause many difficulties to shipowners in the matter of buying and selling of ships and would depress considerably second-hand prices; the time limit should thus be no more than six months.

Mr. GUPTA (India) agreed that there was no question of altering a single value for the displacement in the case of a so-called "pilgrim ship" since it was assigned two displacements; one in accordance with the Load Line regulations and the other in relation to its function as a passenger ship. The ship was then authorized to use the deeper draught only when it was carrying less than twelve passengers.

He nevertheless still maintained that in the case of other ships there was no virtue in imposing a long period of time within which the displacement could not be changed.

Mr. CHRISTIANSEN (Norway) held that there was no valid reason for putting any time limitation on the changing of net tonnage or displacement since it would only restrict owners in the normal operation of their ships.

Drawing attention to paragraph 7(3) of TM/CONF/C.2/WP.12, where it was envisaged that the time limitation would be waived if the flag of the ship were changed or if it underwent large-scale modification, he asked whether that should not be extended to cover the case of change of owner, as well.

The CHAIRMAN pointed out that in TM/CONF/WP.5, paragraph 1(g) the Conference had decided that the change from closed to open shelter conditions should not be allowed at frequent intervals; the Committee had only to decide how to interpret the concept of infrequent change.

The CHAIRMAN asked the Committee whether it was in favour of imposing a time interval of one year or less, or in favour of a period of more than one year, for changes in the tonnage certificate of a ship.

There were 27 votes in favour of a time interval of one year or less and six in favour of a time interval of more than one year.

It was decided to impose a time interval of one year or less.

The CHAIRMAN asked the Committee whether it was in favour of a time interval of one year or of six months.

There were 20 votes in favour of a time interval of one year and 12 in favour of a time interval of six months.

It was decided to impose a time interval of one year within which the tonnage certificate of a ship could not be changed.

Mr. HERD (Australia), referring to the question of the "pilgrim ships" mentioned by the delegation of India, pointed out that Australian ships which carried either passengers or cargo had only one tonnage certificate. Since tonnage was to be made dependent on displacement, such ships would be given two certificates, one for their permitted displacement with cargo and one for passenger trade. His delegation was opposed to the idea of dual tonnages for purely cargo-carrying ships.

Mr. ROSELL (Denmark) pointed out that such ships would have the same tonnage certificate all the time; it was only the draught which altered in accordance with the defined conditions of sailing. He considered that the Committee should decide whether the tonnage should be altered at all under the two or three sets of conditions; in his view the only solution was to issue a tonnage certificate in accordance with the largest draught, i.e. the draught calculated in accordance with the 1966 Load Line Convention.

The CHAIRMAN concluded that the tonnage assigned should not correspond to the largest draught but to the largest tonnage. Ships having two tonnage load lines, one for cargo and one for passengers, would then have only one certificate, listing a figure which could be changed every year, but which for the duration of that year would be the highest value calculated for the tonnage on either draught, or from the displacement plus the volume of passenger ships, whichever the Working Group might decide.

Mr. GUPTA (India) maintained that "pilgrim ships" do not have two load lines but rather one load line and one subdivision mark.

The CHAIRMAN pointed out that the subdivision mark was recognized as a load line under the 1966 Load Line Convention.

The meeting rose at 12.45 p.m.



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INTERNATIONAL CONFERENCE
ON TONNAGE MEASUREMENT, 1969

PROVISIONAL SUMMARY RECORD OF THE TWELFTH MEETING
held at Church House, Westminster, London, S.W.1,
on Friday, 6 June 1969, at 2.35 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1.

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6;
TM/CONF/C.2/2; TM/CONF/C.2/WP.12;
TM/CONF/C.2/WP.14) (continued)

The CHAIRMAN recalled that, at the previous meeting, the Committee had decided that the length of time which must elapse between two reductions in net tonnage for ships with only one load line should be one year instead of five. In view of the practical difficulties that arose for ships which had more than one load line (for example, those which carried passengers and cargo alternately), the Chairman suggested that the solution of that problem of detail should be deferred until the following Monday.

Mr. CHRISTIANSEN (Norway) stated that the new regulations envisaged would penalize certain ships, such as those just mentioned by the Chairman, which might, under the regulations currently in force, obtain new tonnage certificates up to three times a year. Thus there was a danger that the regulations might adversely affect the shipping industry by inducing owners to cancel their orders. The Norwegian delegation hoped that the new Convention would not cause too much disruption in the shipping industry and in the economic conditions of transport by sea. The displacement concept gave rise to many difficulties when used as a parameter, and should be the subject of thorough study by a small group. While realizing that it was not possible to reverse decisions taken by the Conference, he wished to emphasize the dangers involved in combining the load line concept (which was concerned with the safety of the ship) with that of the tonnage.

Mr. CONTOGEOORGIS (Greece), while seeing no objection to deferring the solution of the problem until the following Monday,

suggested that provision should be made for ships operating alternately as passenger ships and cargo ships to have two certificates, of which one only would be valid at any one time according to circumstances.

The CHAIRMAN pointed out that such a system would be very close to that of the tonnage mark which the Conference did not approve.

Turning to Progress Report No. 4 (TM/CONF/C.2/WP.12), he asked the Committee to state its views on sub-paragraph 2 of paragraph 5, which related to special craft.

Mr. JONES (New Zealand) remarked that moulded displacement, the principle of which had been adopted in sub-paragraph 1 of the same paragraph, was suitable for steel ships but not for wooden ones. Sub-paragraph 2 should therefore mention also ships other than metal ones.

Mr. CHRISTIANSEN (Norway) would like to see cargo submarines mentioned in sub-paragraph 2, since they might be used in the future.

The CHAIRMAN, supported by Mr. NOZIGLIA (Argentina), said that, in that connexion, the Committee would have to wait to see whether or not the Working Group decided to include water ballast in the calculation of net tonnage.

Mr. WILSON (UK) considered there was no need to include in the text of the Convention craft which might not come into existence for a long time.

Mr. MURPHY (USA) thought that since there were not many special craft, it might perhaps suffice to adopt a regulation similar to that of the Load Line Convention, which left it to the administration to determine their displacement. When such craft came into more general use, the Convention might be amended to take account of them.

Mr. BECKWITH (Liberia) supported that suggestion, especially since the note on Amendment Procedures of Conventions (TM/CONF/15) provided for amendments necessitated by technological change.

Mr. GUPTA (India) suggested making a distinction between existing special craft and those of the future.

Mr. SASAMURA (Committee Secretary) proposed a text similar to that of regulation 2, paragraph 4, of the Load Lines Convention which would read: "The tonnage of a ship whose constructional features are such as to render the application of the provisions of this Annexe unreasonable or impracticable shall be as determined by the Administration."

The CHAIRMAN put that text to the vote.

The text suggested by the Secretary of the Committee was approved by 32 votes to none.

Mr. VAN DER TOORN (Netherlands) suggested supplementing the sub-paragraph by a provision to the effect that (Governments which registered craft of that kind should so inform IMCO.)

The CHAIRMAN drew the Committee's attention to sub-paragraph 2 of paragraph 7 which had to be supplemented to indicate that the load line assigned was that on which the displacement was based in accordance with sub-paragraph 1. Sub-paragraph 3 of paragraph 7 would have to be amended to make it possible for a ship with more than one load line to change from one to the other if from being a cargo ship it became a passenger ship.

Mr. KING (Kuwait) suggested that the beginning of the sub-paragraph should be amended to read: "If the displacement should change due to the alteration of the position of the load line".

The CHAIRMAN proposed that, for sub-paragraphs 2 and 3, the Committee should approve in principle the amendment he had referred to, leaving it to the Secretariat to draft the exact wording.

It was so decided.

Mr. GUPTA (India) asked whether the last sentence of sub-paragraph 2 would apply to ships which carried passengers and cargo alternately. He hoped that was not the case. He supported the text suggested by the representative of Kuwait.

Mr. GRUNER (Finland), referring to sub-paragraph 3, suggested replacing the words "preceding certification" at the end of the first sentence by the words "preceding decreasing certification".

Mr. ROCQUEMONT (France) said that the intention of his delegation, which was the original author of sub-paragraph 3, had been that the last sentence should compensate for the rigidity of a five-year period. Since that period had been reduced to one year, and since changes of nationality might make frauds possible, he proposed the pure and simple deletion of the last sentence.

Mr. UGLAND (Norway) opposed the French proposal. It was the duty of IMCO to ensure that transport by sea should remain as economical as possible. If the new Convention should prevent changes in certification under which there might in existing circumstances be advantage to be gained, for instance, by ships which carried passengers and cargo alternately, shipowners would have to seek compensation at the expense of their customers.

Mr. GUPTA (India) proposed that this problem, which was not purely technical, should be referred to the General Committee.

Mr. SIMPSON (Liberia) supported by Mr. KING (Kuwait), considered that the provisions concerning large-scale modification should in any case be maintained. He thought, moreover, that changes of ownership should be considered on the same footing as changes of nationality.

Mr. GUPTA (India) suggested that the last sentence of sub-paragraph 3 should read as follows: "However, if the flag or ownership of the ship is changed or if the ship has undergone large-scale modification, the net tonnage may be decreased immediately".

Mr. MURPHY (USA) felt that, if the ship changed ownership or flag or underwent large-scale modification, the shipowner should be able to decrease the net tonnage without such a decision being described as "fraud".

Mr. ROSELL (Denmark) emphasized that the purpose of the Convention was certainly not to create difficulties for the shipping industry, and that an owner was free to operate his ship as he pleased.

Mr. ROCQUEMONT (France) considered that the Committee should vote separately on the three concepts: change of flag, change of ownership, large-scale modification.

At the request of Mr. CHRISTIANSEN (Norway) votes were taken by roll-call on the question whether the concepts of change of flag and change of ownership should be retained.

Sweden, having been drawn by lot by the Chairman, was called upon to vote first. The result of the vote was as follows:

In favour: Sweden, United Arab Republic, United Kingdom of Great Britain and Northern Ireland, United States of America, Venezuela, Yugoslavia, Argentina, Australia, Brazil, Bulgaria, Canada, China, Denmark, Federal Republic of Germany, Finland, Greece, India, Indonesia, Ireland, Israel, Italy, Japan, Kuwait, Liberia, Netherlands, New Zealand, Nigeria, Norway, Philippines, Poland, Portugal, South Africa.

Against: Belgium, France.

Abstaining: Union of Soviet Socialist Republics.

The concept of change of flag was retained in paragraph 7 (3) of TM/CONF/C.2/WP.12 by 32 votes to 2, with one abstention.

A second roll-call by vote was taken on the concept of change of ownership.

Bulgaria, having been drawn by lot by the Chairman, was called upon to vote first. The result of the vote was as follows:

In favour: Denmark, Federal Republic of Germany, Finland, Greece, India, Indonesia, Ireland, Japan, Kuwait, Liberia, Netherlands, Nigeria, Norway, Poland, Portugal, South Africa, Union of Soviet Socialist Republics, United States of America, Yugoslavia, Brazil.

Against: Bulgaria, Canada, China, France, Israel, Italy, New Zealand, Philippines, Sweden, United Arab Republic, Venezuela, Australia, Belgium.

Abstaining: Argentina, United Kingdom of Great Britain and Northern Ireland.

The Committee decided to add the concept of change of ownership to paragraph 7 (3) of TM/CONF/C.2/WP.12 by 20 votes to 13, with 2 abstentions.

The CHAIRMAN noted that no delegation was opposed to the concept of "large-scale modification", which would therefore be retained in the text.

Mr. MUENCH (Israel) wondered whether the Committee's decisions were compatible with the text of Article 9 as approved by the General Committee (TM/CONF/C.1/WP.5).

The CHAIRMAN pointed out that, in accordance with its terms of reference, the Committee had dealt with technical problems, and that, if necessary, the Conference would bring the conclusions of the General Committee and of the Technical Committee into line.

In reply to a question by Mr. KING (Kuwait), he said that, in his opinion, an owner who bought a ship could decrease the tonnage even if it had been decreased already at the time of purchase.

Paragraph 8

Mr. ROCQUEMONT (France) remarked that in certain cases slight modifications could alter the scantling draught which every ship should have.

The CHAIRMAN said he feared that a definition of large-scale modification might necessitate complicated calculations and that, if a definition were adopted, everyone would try to interpret it to his own advantage.

Mr. ROSELL (Denmark) recalled that the Conference on Load Lines had had to abandon the idea of embodying such a definition in the text of the Convention. In his opinion, a modification could be classed as large-scale when it changed the displacement, volume or tonnage values.

Mr. WILSON (UK) proposed that any modification involving a change of at least ten per cent in gross tonnage should be considered as a large-scale modification.

Mr. GUPTA (India) supported the United Kingdom proposal

and Mr. ROCQUEMONT (France) thought that it provided an excellent basis for drafting.

Mr. CONTOGEOGIS (Greece) suggested that the interval of one year should not be imposed if the ship had undergone large-scale modification or modification considered as such by the Administration.

Mr. ERIKSSON (Sweden) and Mr. SIMPSON (Liberia) were in favour of the suggestion made by the Greek delegation.

Mr. MURPHY (USA) said that he would like the Committee to approve that suggestion, and to illustrate it with an example.

The CHAIRMAN requested the United Kingdom and United States representatives each to prepare a text to be submitted to the next meeting of the Committee.

He reminded the Committee that a small group had considered certain questions left in abeyance in connexion with Regulation 6 and that its conclusions were given in TM/CONF/C.2/WP.14. He called for a member of the group to be kind enough to introduce that document to the Technical Committee.

Mr. WILSON (UK) said that the group had had several possibilities: either to take up the Netherlands proposal which was very similar to the Panama Canal Rules - and was broader than the provisions contained in TM/CONF/6 - or not to exempt from measurement any space provided with any means of closing whatsoever. As the United Kingdom proposal (TM/CONF/C.2/2) had seemed to take a middle line, the Group had adopted it as a working basis.

The wording of paragraph (2) was in line with the Panama Canal rules concerning enclosed spaces.

The Group had been unanimously in favour of inserting in paragraph (3), after the words: "shall not be considered as enclosed spaces" the words "unless they are provided with shelves or other means for stowing cargo or stores."

In paragraph (3)(a), the Group had replaced the words "a curtain plate not exceeding 1.6 ft. in depth" by the words "a curtain plate not exceeding in depth the adjoining deck-beams." In the third line, it had replaced the words "than
TM/CONF/C.2/SR.12

half the breadth of the deck" by the words "than 90 per cent of the breadth of the deck". It had also deleted the whole of the last phrase starting with the words "provided that...."

Lastly, in the second sub-paragraph of paragraph (3)(a), it had replaced "convergence of fore and aft bulkheads" by "convergence of the shell plating" and further on, the concept of "half the breadth of the deck" and "the least half breadth of the deck" by "90 per cent of the breadth of the deck".

In paragraphs (3)(b) and (c), some members of the group had been in favour of replacing "3 ft./ (0.9 metres)" by "2.5 ft./ (0.75 metres)" and the United Kingdom delegation had willingly fallen in with that viewpoint. In addition, the group had decided to delete the phrase in brackets in sub-paragraph (c).

Lastly, the speaker drew attention to the fact that sub-paragraph (f) had been retained but might nevertheless seem superfluous.

Mr. CHRISTIANSEN (Norway) pointed out that there had never been an attempt to define open and closed spaces simultaneously. It would perhaps be preferable to have a definition of open spaces. Moreover, in the passage in paragraph (3) relating to spaces provided with shelves or other means for securing cargo or stores, it was questionable whether such spaces should not be considered as open but he did not think so himself. Lastly, he thought those provisions should be accompanied by diagrams.

Mr. LEIBENFROST (Yugoslavia), referring to superstructures, asked whether a deck-house equal to, or less than, 90 per cent of the breadth of the deck should be considered as an open space.

Mr. VAN DER TOORN (Netherlands) observed that the Committee hoped to have the adherence of canal authorities. Since the regulations were similar to those of the Panama Canal it might

be as well to have the opinion of the representative of the authorities of that canal.

Mr. HABACHI (Suez Canal Authority) supported the idea put forward by the Norwegian representative as to the need to illustrate the exemptions by diagrams.

Mr. WILSON (UK) replying to the comments by the representatives of Norway and Yugoslavia explained that the Group had not tried to define what should be included or excluded. As to stowage arrangements the Group was unanimously of the opinion that they would cancel out the exemption. He recognized that diagrams would indeed be very useful.

In regard to superstructures extending from one side of the ship to the other, the Group thought it better to retain the criterion of 90 per cent but that criterion would not apply to the deck-house. Some delegations had thought it would be better to apply the Panama Canal rules; however, it seemed to him preferable to have as few exemptions as possible.

After a short discussion on the organization of the Committee's work in which Mr. ROCQUEMONT (France), Mr. MURPHY (USA), and Mr. GUPTA (India) took part, the CHAIRMAN reminded the Committee that, according to its terms of reference, the Technical Committee could not deal with matters such as the "transitional provisions" or the definition of "new ships".

Replying to questions put by Mr. YU-SHANG LI (China) and Mr. SIMPSON (Liberia) concerning paragraph 4 of TM/CONF/C.2/WP.15, the CHAIRMAN stated that what was referred to was the summer load line in the case of ships plying in tropical waters and that that should be clearly stated; moreover the load line referred to was the summer load line as defined by the national regulations.

The meeting rose at 5.15 p.m.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE THIRTEENTH MEETING

held at Church House, Westminster, London, S.W.1,
on Monday, 9 June 1969, at 9.30. a.m.

Chairman: Mr. F. SPINELLI (Italy)

Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

Page

Agenda item 4 - Consideration and preparation of proposed 3
technical regulations on tonnage measurement
and tonnage certificates (continued)

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6;
TM/CONF/C.2/WP.14; TM/CONF/C.2/WP.18;
TM/CONF/C.2/WP.19) (continued)

The CHAIRMAN suggested adding the words "or movable" after the word "fixed" in the second line of paragraph (2). The additional stipulation would serve to prevent a shipowner from installing doors, thereby reducing the volume of enclosed spaces.

The proposal was approved.

Mr. ter HAAR (Netherlands) thought that Regulation 6 should contain a definition of the upper deck supplementing that of enclosed spaces. In his opinion, to avoid any misunderstanding over enclosed spaces, it would be preferable to delete both the end of the first sentence of paragraph (2), from the words "fixed partitions" onwards, and also the end of the second sentence, from the words "opening or openings" onwards.

Mr. CHRISTIANSEN (Norway) wished to know whether the word "coverings" would apply also to tarpaulins and plastic covers.

Mr. WILSON (UK) was in favour of the suggestions put forward by the Netherlands delegation.

The CHAIRMAN asked the Committee whether it wished to delete the words "on or above the upper deck" in the first line of the paragraph.

Mr. WILSON (UK) pointed out that while paragraph (1) related to the volume of all enclosed spaces, paragraphs (2) and (3) dealt with enclosed spaces on or above the upper deck; he was therefore opposed to the deletion of those words.

As for a definition of the upper deck, it would be of value only if Regulation 6 stipulated that spaces above the upper deck were exempted - which was not the case, since the parameter adopted for the tonnage was the total volume.

Mr. HABACHI (Suez Canal Authority) said that, after examining the proposed amendment to Regulation 6 submitted by the Working Group, he considered that in view of the abolition of the existing system of exemptions for superstructures, the volume of the exempted portions should be added to the gross tonnage of the ship; in other words, a new tonnage certificate would have to be issued to the ship. For a superstructure to qualify for exemption, it would have to conform to the conditions laid down in paragraph (3), which meant that the fore and aft bulkheads of the superstructures would have to be removed so that the superstructure itself became a large open space with a minimum width of opening of not less than 90 per cent of the breadth of the deck.

Under the Suez Canal Rules, the existence of a curtain plate, even one not exceeding in depth the adjoining deck beams, entailed the application of charges to the wide open space.

The recesses mentioned in paragraph (3)(e) should, if situated fore or aft of a deck space or of a superstructure, be included in the chargeable volume, with the definition of enclosed spaces contained in paragraph (2). The measurement of those spaces was identical with that of the wing shelters connecting the three first-tier superstructures on oil tankers.

Paragraph (3)(f) very properly provided that any uncovered and undecked space inboard of the hull was not included in the gross tonnage, but the principle should be applied to any space fulfilling those conditions without thereby benefitting the stern slipways of certain trawlers.

In December 1961, IMCO had put forward five recommendations concerning any new universal system of tonnage measurement. Under the first, the existing exemptions were to be abolished, but the Conference seemed set on replacing them by new exemptions requiring more complicated calculations. The new system was also to be simple, but he feared that the results would scarcely be in keeping with the recommendation. The seaworthiness and efficiency of the ship ought not to be adversely affected but the removal of the fore and aft bulkheads of the superstructures was certainly not likely to facilitate the approval of ships. IMCO had recommended also that the system should not be dependent on certain details of construction; but if the shipyards were to build ships which would benefit from the advantages of the new system, they would have to include big wide open spaces. Finally, the gross tonnage ought to express the total volume of the ship and that objective could not be said to have been achieved.

He ended his statement with the suggestion that the Committee should, in the French text, replace the word "construction" by the word "superstructure" in the fourth and twenty-second lines of page 2 and in the seventh and tenth lines of page 3. In the English text, the term "side-to-side" should be inserted before the word "erection" (or "erections") in lines 6, 27 and 32 of page 2 and in line 14 of page 3.

The CHAIRMAN suggested that the Committee should delete the last parts of the first and second sentences of paragraph (2), as proposed by the Netherlands delegation.

The proposal was approved.

TM/CONF/C.2/SR.13

Mr. MURPHY (USA) proposed the addition of the words "in the ship's hold" after the words "or openings" in line 7 of paragraph (2).

The proposal was approved.

Mr. GUPTA (India) said that, like the Norwegian representative, he would like further clarification of the meaning of the term "coverings", as the problem was of importance, particularly for navigation in tropical waters.

Mr. WILSON (UK) suggested the addition of the phrase "other than awnings".

Paragraph 3

The CHAIRMAN stated that at page 2, line 4, the words "gross tonnage" should be replaced by the words "total volume".

Sub-paragraph (a)

Mr. CHRISTIANSEN (Norway) feared that, under the terms of the new regulation, the entire hold might be considered as an open space.

The CHAIRMAN did not share that fear, since any space needed for cargo would automatically be considered as an enclosed space.

Mr. LEIBENFROST (Yugoslavia) suggested introducing into the second sub-paragraph the definition of "breadth of the deck" already used in the International Convention on Load Lines.

The CHAIRMAN agreed that the breadth ought indeed to be defined. As defined in the Load Line Convention, a superstructure was a structure extending from side to side for virtually the entire width of the ship. He wondered whether that definition should be retained or whether it should be replaced by another.

Mr. CHRISTIANSEN (Norway) was of the opinion that the definitions under discussion would be clearer if they were illustrated with diagrams.

Mr. LEIBENFROST (Yugoslavia), quoting from the Convention on Load Lines, recalled that the provisions relating to superstructures spoke of the "side plating not being inboard of the shell plating more than 4 per cent of the breadth"; which was insufficient if 82 per cent were added for the breadth of the superstructures. No one could build such a ship.

The CHAIRMAN said that his understanding of the matter was that the breadth of the superstructures should accordingly be either the total width of the ship, or that width less 8 per cent.

As for the question of illustrating the definitions, if the Committee felt that diagrams would serve a useful purpose, he would ask the Group which had drawn up TM/CONF/C.2/WP.14 to be good enough to prepare some diagrams also.

Mr. BONN (Canada), referring to the beginning of the second sub-paragraph of paragraph 3(a), which he quoted, asked what space would be exempted in that case.

Mr. WILSON (UK) explained that the intention of the ad hoc Working Group had been to bring the provisions into line with the Panama Canal Rules and so to discourage shipowners from building side deck-houses. A diagram would certainly be very useful, and he would be grateful to the French representative, who was near the blackboard, if he would kindly draw one.

Mr. CABARIBERE (France) illustrating his reply with the help of blackboard drawings representing a conventional forecastle and a triangular forecastle, explained exactly how the spaces exempt from measurement would differ, according to whether or not there was a side deckhouse.

The CHAIRMAN drew attention to the need to define the "outside plating" in order to prevent shipbuilders from finding loopholes.

Mr. WILSON(UK) said that the term "outside plating" had been used intentionally as being the one which appeared to be the clearest.

Mr. BONN (Canada) asked what would happen in the case of ships whose stem opened up, as in the "roll on-roll off" type of ship.

Mr. WILSON (UK) replied that that type of ship was provided with stem doors, and that, in that case, it would be the breadth of deck which would be considered, the exempted space being limited to half the width of the opening.

Mr. MURPHY (USA) pointed out that sub-paragraph 3(a), line 3 should be amended to read "a curtain plate not exceeding by more than 1 inch the depth of the adjoining deck beams..."

Mr. GUPTA (India) considered that the text should be so worded as to achieve the maximum of simplicity, and an effort should be made to avoid any definition which might influence ships design.

Mr. ROCQUEMONT (France) agreed that defining enclosed and open spaces was of necessity a complex matter, and that the only way to overcome the difficulties was to have recourse to diagrams. Inasmuch as the Convention under discussion would frequently refer to the text of the International Convention on Load Lines, (which allowed a reduction in freeboard for enclosed spaces), he advocated the following principle: whenever a superstructure carried a right to a reduction in freeboard, it would be measured, so as to avoid the potential paradox of a ship having a superstructure which entitled it to a reduction in freeboard, on the one hand, while, on the other, it was not considered as an enclosed space.

Mr. WILSON (UK), in reply to the representative of India, stated that, if cargo was carried in spaces normally exempt from measurement, those spaces ceased to be exempt. There did not appear to be any likelihood, therefore, that the regulations

would affect ship design. He further drew the attention of the representative of France to the fact that, in accordance with the opinion of freeboard experts, in the International Convention on Load Lines, a space not having a Class 1 opening was not considered as an enclosed space, and that, as a result that type of superstructure would not be taken into account.

Sub-paragraph 3(a) was approved in principle.

Sub-paragraph 3(b)

Mr. LEIBENFROST (Yugoslavia) drew attention to a typing error in line 5 of the English text, where "bulkhead" should read "bulwark".

Sub-paragraph 3(b) was approved in principle.

Sub-paragraph 3(c)

The CHAIRMAN stated that in paragraph 3(c) also, the Drafting Committee would replace the expression "gross tonnage" by the expression "total volume".

Mr. GUPTA (India) wondered whether sub-paragraph (c) applied to the large side openings provided for the purpose of ensuring adequate ventilation in the 'tween-deck spaces on pilgrim ships to which the SIMLA Rules applied, and whether the sponsors of the text had taken that matter into consideration.

Mr. WILSON (UK) was glad to reassure the representative of India on that point. The matter had indeed been taken into consideration. Sub-paragraph 3(c) applied to the side-openings of those ships, to the extent to which the exempted 'tween-deck space was exactly aligned with the opening, thus restricting the exempted space.

Mr. DE JONG (Netherlands) said it would be difficult to determine the exempted spaces if Regulation 6 contained no precise definitions of the meaning of "erection", "super-structure" and consequently of "upper deck".

Mr. WILSON (UK) said that the Working Group had distinguished between the terms "side-to-side erection", mentioned only in sub-paragraph (c), and "erection" which might also designate a deck-house.

Mr. ROCQUEMONT (France) thought that to introduce special definitions in the new convention would cause difficulties, because the Load Line Convention already included the required definitions. He proposed that a clause should be included in Regulation 6 providing that, (for ships to which the Load Line Convention applied,) the enclosed spaces should include at least (a) the whole volume below the freeboard deck and (b) the whole volume of the superstructures as defined in the Load Line Convention; it would be understood that that was a minimum, and that other spaces might be added to those enclosed spaces. The French delegation intended to submit a proposal on that point.

Mr. DE JONG (Netherlands) approved that proposal in principle, but pointed out that the definitions of the complete deck and of the upper deck proposed by the USSR in connexion with Regulation 2 of Proposal C would be quite appropriate.

The CHAIRMAN suggested that the Working Group should endeavour to draw up a definition of a "side-to-side erection".

Mr. HABACHI (Suez Canal Authority) proposed the adoption of the definition given in the Suez Canal Rules namely, that the side walls should not be more than one English foot from the sides of the ship.

The CHAIRMAN proposed that the Committee approve sub-paragraph (c) in principle, subject to a more precise definition of the superstructures.

It was so agreed.

Sub-paragraphs (d), (e) and (f) gave rise to no comments.

Mr. JONES (New Zealand) wondered whether a sub-paragraph should not be added to Regulation 6 (providing for the exemption of various spaces such as the inside of the funnels, the cranes and so on.)

After a short exchange of views in which Mr. ROSELL (Denmark), Mr. WILSON (UK), Mr. GUPTA (India) and the CHAIRMAN participated, the latter expressed the opinion that this was a problem of minor importance because the spaces in question were very limited. He proposed, therefore, that mention of them be omitted.

It was so agreed.

Mr. WILSON (UK) drew the attention of the Committee to the paragraph which his delegation proposed to add to Regulation 6 (TM/CONF/C.2/WP.18), providing for a penalty when the conditions for exemption were not respected. That penalty would be lifted only when the ship received a new certificate on a change of flag or ownership.

Mr. CHRISTIANSEN (Norway) considered that the space thus penalized might be exempted again if the ship underwent large-scale modification affecting that particular space.

Mr. WILSON (UK) accepted that suggestion.

The United Kingdom Proposal (TM/CONF/C.2/WP.18), thus amended, was approved.

PROGRESS REPORT OF THE WORKING GROUP ON GROSS AND NET TONNAGE
(Part I) (TM/CONF/C.2/WP.19)

Mr. ERIKSSON (Sweden), Chairman of the Working Group, said that the Group had not had time to finish its task completely but that the annexes would contain enough data on the results produced by the different formulae to enable the Committee to

TM/CONF/C.2/SR.13

make a choice between them. When that choice had been made, the Group could make definitive calculations on the basis of whatever coefficient the Committee considered most suitable. The Working Party had based its calculations on the standard deviation, in accordance with the statistical theory set out in the study submitted by the United States (TM/CONF/C.2/3). The computer experts and the chairmen of the three task groups were at the disposal of the Committee for any further information which might be required.

Taking the Report paragraph by paragraph, he said in regard to paragraph 5, that the Working Group had estimated that the 600 or so ships covered by the IMCO data and the sample prepared by the United Kingdom were sufficiently representative of world shipping as far as ship size was concerned; the Group had decided to undertake computer studies on series of ships of each size. With regard to paragraph 7(d), he said that if a correction factor for passenger ships was not used, the result would be a tonnage markedly lower than the present tonnage, which would create difficulties with the port authorities. As IMCO had no data on the total volume of passenger spaces, and as the Italian data referred only to 17 ships, the United Kingdom had proposed that additional information be obtained, and the Working Group had put forward a formula based on the number of passengers (sub-paragraph (e)) in which the denominator 10 appeared to be a satisfactory approximation; that formula would be tested on a larger number of ships.

The third task group was carrying out a study of the more complicated formula proposed for the calculation of net tonnage. It had come up against difficulties, because the IMCO data dealing with water ballast deductions on the national certificates did not show the total volume of the different

types of water ballast. However, the task group would try, on the basis of the information available to it on a limited number of Japanese and British ships, to calculate the volume of water ballast for all types of ships, by using the relation between the total volume of ballast and the volume of water ballast. Another solution might be to assign to all ships a certain volume of water ballast, e.g. 10% of the displacement.

With regard to the correction factor for passengers in the same formula, the task group proposed, following a study by Denmark and Italy on a small number of passenger ships, to give to this factor a_2 the value $1 + \frac{D}{10000}$, and France was to make a study on 60 ships of the results thus obtained.

The Working Group had also studied the formula proposed by Denmark for calculating gross tonnage (TM/CONF/C.2/WP.10 and Add.1), but had reached no decision.

Mr. MURPHY (USA) said that in the list of ships shown in Annex I, the number of ore carriers should be 50 and not 15.

The meeting rose at 12.30 p.m.



IMCO

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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE FOURTEENTH MEETING

held at Church House, Westminster, London, S.W.1,
on Monday, 9 June 1969, at 2.35 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 3</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates	3

AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED BY
THE CONFERENCE (TM/CONF/6; TM/CONF/3;
TM/CONF/C.2/2; TM/CONF/C.2/3; TM/CONF/C.2/WP.14;
TM/CONF/C.2/WP.19 (continued) TM/CONF/C.2/WP.10;
and Add.1)

Mr. PRIVALOV (USSR) expressed his delegation's appreciation of the selfless work done by the Working Group on gross and net tonnage. In connexion with the formula for gross tonnage, he believed that the results produced fully satisfied the terms of reference stipulated by the Conference; the next step clearly was to determine how the variable coefficients could be adopted to give regulations of the required accuracy.

As regards the net tonnage formula, he regretted that no substantial results had been achieved and that there was still a considerable divergence in the figures arrived at on the various formulae considered, even where the coefficients had not been determined for the entire fleet but with the exclusion of certain categories of vessel. The Technical Committee had, nevertheless, to implement the decision of the Plenary session to determine the basis for calculating net tonnage, but at the present interim stage of discussion it could not proceed without more specific data and conclusions before it.

Gross tonnage

Mr. ROCQUEMONT (France) also extended his congratulations to the Working Group. He noted that from a comparison of the first column of results given in Annex I to TM/CONF/C.2/WP.19, (calculated for a constant coefficient), with the second and third columns, (both calculated for a coefficient as a function of the volume but with different constants), it

was clear that the former gave results which were substantially as valid as those obtained for the latter, particularly as regards the standard deviation of the net tonnage. For reasons of simplicity, therefore, his delegation favoured adoption of the constant coefficient postulated by the Working Group.

Mr. PROHASKA (Denmark) recalled that in introducing the Progress Report of the Working Group, its Chairman had stated that its results and conclusions were only provisional; it was premature, therefore, to assume that the constant coefficient was as good as any other solution.

In that connexion too, he pointed out that the first column of results had been calculated from a computer programme with a coefficient which was designed to give the lowest minimum deviation possible, whereas the other columns had been calculated simply from studies of graphs of data available with no conditions imposed on the coefficient. If the figures used in the last two columns were changed in the formula by only 3%, the deviation about the mean would then be appreciably lower than for the first column.

Mr. MURPHY (USA) also applauded the Working Group and noted that the three columns of results gave fairly close results. His delegation, however, gave tentative preference to the third solution, since it dealt rather more equitably with the smaller ships.

Mr. GUPTA (India) observed that when the Working Group came to re-consider the figures it had used in its provisional calculations, it should take a constant coefficient of 0.3, rather than 0.296, since that would greatly simplify calculations and yet make little difference to the final result.

Mr. WILSON (UK), supported by Mr. NOZIGLIA (Argentina), said in principle his delegation agreed with the views expressed by the United States delegation; a final opinion was, however, not possible until the graphs of the data used for the results were available for study.

Mr. ROCQUEMONT (France) agreed that the Committee needed to have a curve to indicate the basis for the values of the coefficients used in the second and third columns of results.

The CHAIRMAN suggested that it would be useful to have a graph of the total volume, as abeissa, versus the gross tonnage, as calculated from the formula, in each case.

Mr. GREGORY (UK), Chairman of Group II of the Working Group, explained that copies of the United Kingdom graphs and one for thirty-two ships of the Netherlands fleet were available and could be circulated to delegations; plots of the United States data could also be made if required.

Mr. PROHASKA (Denmark) pointed out that the final choice of formula would have a great effect on all ships. Adoption of the formula $GT = aV$ would have serious repercussions on the future design of large container ships which currently had light cargoes and large freeboard, with a freeboard to draught ratio of around 2.4. The first formula would, however, assign them enormous gross and net tonnages and thus encourage designers to decrease the freeboard and provide for more containers on deck, with grave consequences in respect of safety. Likewise, the old open shelter-deckers, currently operating with no deck openings, would have such high gross tonnages that they would become uneconomical to run.

It was for those reasons that the Danish delegation had submitted the proposal contained in TM/CONF/C.2/WP.10, TM/CONF/C.2/WP.10/Add.1 to introduce a correction to the proposed

factor, for inclusion in the gross tonnage formula, defining the ratio of maximum designed draught to maximum draught obtainable for full scantling vessels. His delegation considered that such a simple addition to the formula would make it much easier for owners to allocate the right ships for the type of trade in question.

Mr. DE JONG (Netherlands) observed that since gross tonnage was to be dependent on displacement, a definition of the uppermost deck was needed to avoid designers incorporating as many open spaces as possible. His delegation favoured introduction of a reduction factor in the formula: i.e. some such coefficient as a constant, plus another constant multiplied by a logarithmic function of the volume; the whole to be multiplied by the ratio of designed draught to maximum draught.

Since, however, the Committee had not been instructed to investigate such a solution it would have first to revert to the Plenary session for a re-formulation of its mandate.

Net tonnage

Mr. WILSON (UK) explained that the list of ships given in the table on page 1 of Annex I of TM/CONF/C.2/WP.19 did not necessarily show the proper balance of the different numbers of vessels of any given type in the world fleet; they were, in fact, based on data obtained from a previous IMCO exercise. He pointed out, however, that the latest figures presented in TM/CONF/3 represented a careful attempt to show a reasonable balance for the different types of ship.

Mr. ROCQUEMONT (France) pointed out that the results calculated for the proposed net tonnage formula with both non variable and variable coefficients [columns (i), (ii) and (iii)] showed a considerably higher mean deviation ratio and standard deviation than those for gross tonnage.

The CHAIRMAN noted that the figures indicated that some allowance should be made for passenger spaces since column (ii), where all types of passenger ships and ferries were excluded, showed an improvement in standard deviation of about twenty per cent.

Mr. PROHASKA (Denmark) agreed that some term to take account of passenger space or number would greatly improve the formula, but the results, whichever the formula used, will not be as close as possible to existing values because there is no criterion in existing figures for net tonnage.

Mr. GREGORY (UK) said that the original point had been that the exclusion of passenger ships under column (i) would reduce the standard deviation. The Working Group was examining other formulae, including a constant related to displacement plus a passenger number to be applied to passenger ships.

Mr. MURPHY (USA) agreed with the Chairman's conclusion on the need to pay more attention to passenger ships under column (i). As to the problem of bulk and oil carriers under column (iii), his own conclusion was that a simple formula would not produce results close to the figures applying to existing fleets which took into account the fact that fleets included different types of ships used for different purposes. It would be better to wait for the remainder of the Working Group's report.

Mr. ROCQUEMONT (France) said that he agreed with the Chairman's comments but doubted that satisfactory results could ever be obtained. He wondered whether the corrections were worthwhile.

Mr. MUENCH (Israel) said that without the background data and without a diagram it was difficult to assess the respective values of the formulae. It was clear that by eliminating passenger ships and moving from column (i) to column (ii) the standard deviation would be reduced. It was odd, however, that eliminating bulk and oil carriers and moving from column (ii) to column (iii) should produce so little difference. He shared the French representative's doubts on the likelihood of obtaining better results, since there seemed to be no relationship between displacement and existing net tonnage figures which could readily be incorporated into any formula.

He suggested that the Working Group should be instructed that, should it prove impossible to reduce standard deviation below a stated level, it should be free to explore other possibilities: it might transpire that the Committee's instructions had not provided the right basis for obtaining a formula as close as possible to the existing system.

The CHAIRMAN said that, with the elimination of passenger spaces, even a 20 per cent reduction of standard deviation would greatly reduce the deviation for each passenger ship. It should not, therefore, be assumed that correction was worthwhile for a difference of 20 per cent.

Mr. PROHASKA (Denmark) said that he did not agree with the French representative that a simple formula would produce better results. In the case of an existing ship with a displacement of 20,000 tons, for example, the simple formula of displacement x times 2.7 would produce a net tonnage of 6,000, when the actual net tonnage was 7,500. That was a considerable reduction.

Although it had been agreed that there would be no great harm if passenger ships competing with airlines obtained a reduction, reductions of the kind he had instanced would be too high for the port authorities. The Working Group had discussed the possibility of a formula taking account of passenger ships, but it might welcome further directives from the Committee.

He was opposed to the suggestion by the representative of Israel, because even if the lowest possible standard deviation was obtained, half of the existing passenger ships might find their net tonnage increased. The difficulty was that passenger accommodation differed from ship to ship.

The CHAIRMAN said that there was nothing to prevent the Committee from requesting the Working Group to explore other possibilities. The Committee could not take a decision until it had seen the Working Group's complete report; the present discussion was merely to facilitate a decision.

Mr. PROSSER (UK) said that the Working Group had submitted a valuable interim report, but the most important part, concerning the possibility of obtaining an acceptable net tonnage formula based on displacement with water ballast allowance, was still to come. With the limited time that remained, he doubted the wisdom of deferring a decision until the full report had been received.

There was a clear division of opinion in the Committee. One group supported Proposal C (gross volumetric tonnage plus displacement), while another group, comprising countries with large fleets, opposed it. There was no possibility of an agreed solution unless the gap could be bridged: the time had come for a compromise. The United Kingdom delegation

had always considered Proposal C as the best solution and had understood that it would not come into force too soon for existing ships. It was prepared, however, to make concessions to meet the views of the majority. Any of the three formulae analyzed by the Working Group would serve as a basis for the gross tonnage parameter. His delegation would prefer the solution giving a greater allowance for small ships, which was broadly based on Proposal C. He did not agree with the Danish representative's argument that it would lead to the building of less safe ships, since ships had to comply with many regulations and requirements other than those of tonnage measurement.

The question of net tonnage was more difficult, since every one was aware of the difficulty, if not impossibility, of finding a displacement formula embodying water ballast allowance and giving results not too far from the existing system. True, the Working Group might produce a viable formula. Meanwhile, however, in order to save time, the Committee might consider a possibility of asking the Plenary Conference for authority to reconsider the proposal in document TM/CONF/9/Add.1, verbally amended by the Norwegian representative, in order to include all cargo and passenger spaces, irrespective of their location, but allowing for the introduction of a coefficient which would reflect the change from open to closed shelterdeck condition in ships.

Mr. PROHASKA (Denmark), while not opposing the United Kingdom representative's suggestion that the matter be referred to the Plenary Conference said that the Working Group's formula should be ready for discussion the following morning. He demonstrated by means of a diagram that the Norwegian proposal in document TM/CONF/9/Add.1 would penalize safety by influencing design toward less safe ships. Moreover, measurement of total volume would make it impossible for ships to operate economically since manning was based on gross tonnage in most countries.

Mr. QUARTEY (Ghana) expressed his concern at the Committee's lack of progress. He supported the United Kingdom representative's proposal that all possible avenues should be explored and that the Working Group should pursue its efforts to find a satisfactory system.

Mr. FILIPPOVICH (USSR) said that his delegation, too, was concerned that at the present late stage in the proceedings, the Committee had not even decided on the method of establishing a second tonnage parameter. If a satisfactory solution were not found within a short time, the Committee should accept the United Kingdom representative's proposal.

Mr. ROCQUEMONT (France) said that his delegation had come to the Conference expecting to return home at the end with a draft Convention duly signed and shortly to be ratified. It was time to put an end to the vast variety of tonnage measurement systems. Like the United Kingdom delegation, the French delegation was ready to make concessions. It could not, however, accept a compromise that meant challenging decisions already taken by the Plenary Conference and based on the views of Member states which had matured over the past year. The only possibility of achieving a Convention by the end of the Conference may lie in maintaining such decisions.

Mr. GUPTA (India), in the light of the United Kingdom proposal and the present situation, proposed that the Committee should consider very seriously whether it was necessary to have more than one gross tonnage. Difficulties with new concepts occurred only in the transitional period and the people concerned would soon adjust themselves to a single tonnage.

Mr. CHRISTIANSEN (Norway) said he was gratified by the willingness of the United Kingdom to compromise. Norway had given ample proof throughout the preparatory stages of its own

readiness to participate in give and take and was prepared to compromise further by accepting the three formulae respecting gross tonnage put forward by the Working Group.

On the question of net tonnage, however, it was unable to compromise and, hence, welcomed the United Kingdom suggestion that the matter should be re-opened, in the hope that agreement would be reached on the basis of its own proposal in document TM/CONF/9/Add.1. His delegation's main object was to arrive at a convention that could be ratified in the near future rather than twenty years hence.

Mr. ENDO (Japan) said that his delegation endorsed the United Kingdom proposal and also the suggestion made by Ghana, i.e. that the Working Group should study all possible ways of measuring net tonnage, including the use of volume as the basic parameter. If necessary, the Conference should be asked to consider revised terms of reference for the Technical Committee to that effect.

Mr. ERIKSSON (Sweden) recalled that his delegation was among those preferring a convention based on Proposal C. It would, however, support the United Kingdom proposal as the best procedure in the circumstances.

Mr. MILEWSKI (Poland) said that his delegation also supported the United Kingdom proposal but thought that a further report from the Working Group should be awaited before taking any final decision.

Mr. FOTIADIS (Greece) strongly supported the United Kingdom proposal for the reasons already adduced. Tonnage had to be related to earning capacity and hence had to be measured in terms of volume. Moreover, to get a simple and acceptable system as was generally desired, the proposal on net tonnage contained in document TM/CONF/9/Add. 1 would have to be reconsidered.

Mr. BONN (Canada) said that the results obtained by the Working Group in relation to gross tonnage certainly appeared adequate; a suitable solution was available within the formula proposed. As to net tonnage, his delegation would have preferred measurement on the basis of displacement, but agreed that the point in time had been reached where some compromise was necessary. The United Kingdom suggestion was therefore deserving of every consideration.

Mr. PEREIRA (Brazil) considered that a system as proposed by the United Kingdom would embody the main disadvantages of Proposal C and the main disadvantages of the Norwegian proposal. His delegation would therefore prefer the solution proposed by India, i.e. one parameter only.

Mr. MURPHY (USA) fully endorsed the United Kingdom suggestion but agreed that it would be useful, before taking a final decision, to consider first the further report expected from the Working Group. In view of the pressure of time, he would also support the idea that only the single decision concerned should be reviewed, the more so as the original Norwegian proposal, which represented the summation of all the preparatory work done for the Conference, undoubtedly offered a solution.

Mr. RUSSEL (South Africa) agreed with the United Kingdom that a compromise was necessary. Having regard to the decisions already taken by the Conference, however, he was of opinion that the concept of net tonnage being based on displacement should be retained. In that regard, he recalled the suggestion that a recommendation should be annexed to the prospective Convention to the effect that ports should base their dues on the net tonnage formula evolved by the Conference. He would suggest that, instead, the recommendation should propose dues on the basis of actual displacement, i.e. actual weight in metric tons. That would mean that every ship would, as today, have to have a displacement scale; the maximum of the scale would be the displacement corresponding to the summer load line and the minimum would be the lightest safe ballast condition.

The system in question would offer the following advantages: retention of the advantages under the shelter-deck concept and their extension to all other types of ship; fixing of the load line at the highest position allowed by the International Load Line Convention of 1966; dues at any given time based on pay load, i.e. on actual earnings from freight carried at that time; no dues payable on water ballast except in the light condition, which would be the exception rather than the rule. Dues would of course have to be paid on the weight of steel used to contain water ballast but that was a disadvantage also shared by ice-strengthened ships; and, lastly, all existing difficulties would be resolved.

Mr. OVERGAAUW (Netherlands) pointed out that, in practice, the measurement of net tonnage was not so simple a matter as it might appear, now that the time of the dry cargo sailing ship was past. He was not therefore in favour of the physical measuring of cargo and passenger spaces and would prefer that net tonnage should be a fixed percentage, say 60%, of gross tonnage.

Mr. GUPTA (India) thought that time might be saved by requesting the Conference to meet in plenary session the following day in order to give the Technical Committee guidance in the light of the discussion which had taken place. New terms of reference were certainly needed.

Mr. DE JONG (Netherlands) said the difficulty facing the Committee was to reconcile its term of reference as they now stood. It was impossible in principle to arrive at figures approximating to existing gross and net tonnages on the basis of the criteria laid down. The alternatives open to the Committee were either to set aside the objective of approximate figures, in which case Proposal C would stand; or, to maintain that objective in which case the solution for gross tonnage would have to take account of the open shelter-deck concept and net tonnage could be based on displacement. In the case of net tonnage, it was his opinion that no system would meet the said objective.

Mr. ERIKSSON (Sweden) thought the time was past for introducing further new proposals. The need for compromise along the lines suggested by the United Kingdom was generally recognised. Sweden had originally favoured Proposal C but, in the interest of arriving at an acceptable Convention, it was prepared to accept in principle gross tonnage on the basis of Proposal C and net tonnage on the basis of the latest Norwegian Proposal.

Speaking as Chairman of the Working Group, the Committee might be assured that the Working Group was willing to investigate further the question of water ballast; there seemed to be some doubt, however, whether that work would serve any useful purpose.

Mr. PROHASKA (Denmark), speaking as a member of the Working Group, thought a continuation of the work would prove of value; much would depend on the availability of computer facilities.

Mr. ROCQUEMONT (France), restating his delegation's position, agreed that no perfect solution existed. He saw great danger, however, in engaging along new lines at that stage, and would have thought the more logical course would be to await the further report of the Working Group before taking any such decision.

Mr. MURRAY SMITH (UK) explained that the United Kingdom, in making its proposal, had had no intention of stultifying or criticising the work of the Working Group. Indeed, it still hoped that the Working Group's investigations would lead to a satisfactory solution on the lines laid down by the Conference. It was merely the fear that a generally acceptable answer would not be forthcoming that had led his delegation to suggest that the Committee should have in mind an alternative position to fall back on. And the basis of that position might be the Norwegian Proposal (TM/CONF/9/Add.1) as amended orally by the Norwegian representative and amplified by the introduction of a coefficient to reflect the present trend seen in ships to change from open to closed shelter-deck condition.

The coefficient - on which his delegation was at work - would be a factor of the displacement to the minimum freeboard load line mark and the displacement to a mark chosen by the owner for a period of time; or, alternatively, a relationship between draughts to those two marks or between freeboards to those two marks. It was already accepted that none of the three ratios would give the differences in tonnage which were at present enjoyed under the Tonnage Mark scheme.

The United Kingdom recognised the problems inherent in adopting that method, problems deriving from measurement of total passenger and cargo spaces, for which reason it still hoped that the Working Group might provide an answer that would avoid such complications and the problems of interpretation arising therefrom. It was not, therefore, pleading the case for that particular method but simply pointing out that it might be the only alternative open to the Committee.

The CHAIRMAN said that, if a further report from the Working Group was available by that time, the Committee would continue its work the following morning; otherwise, a decision might be taken respecting the United Kingdom suggestion.

The meeting rose at 5.25 p.m.



IMCO

FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE FIFTEENTH MEETING

held at Church House, Westminster, London, S.W.1,
on Tuesday, 10 June 1969, at 9.45 a.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6;
TM/CONF/WP.5; TM/CONF/C.2/WP.22) (continued)

First draft of regulations for determining gross and net
tonnages of ships (TM/CONF/C.2/WP.22)

The CHAIRMAN proposed that the Committee, while awaiting the Working Group's report on the formula for calculating net tonnage, taking into account the volume of water ballast, should examine the first draft prepared by the Secretariat on the basis of the Committee's decisions.

He pointed out that the provisions of Regulation 2, paragraph 1, which repeated those of the Convention on Load Lines with the modifications proposed by the United Kingdom, applied only to ships without a load line.

Regulation 1 and Paragraph 1 of Regulation 2 gave rise to no objections.

Regulation 2, paragraph 2

Mr. CHRISTIANSEN (Norway), referring to sub-paragraph (a), asked how that definition of moulded depth would be applied to ships whose deck beams were below the deck.

The CHAIRMAN proposed that the text be supplemented by an indication that in such cases the depth should be measured to the under side of the deck plating.

Sub-paragraph (a), thus amended, and sub-paragraphs (b) and (c) of paragraph 2, Regulation 2, gave rise to no objections.

Regulation 2, paragraphs 3 and 4

The CHAIRMAN said that paragraph 3, which was taken from the International Convention for the Safety of Life at Sea, defined berthed passengers and paragraph 4 defined unberthed passengers; those two definitions would be necessary if the Working Group adopted a formula which took the number of passengers into account in calculating net tonnage. A problem arose, however, in the case of persons who could be classed neither as crew nor as passengers, such as drivers of lorries carried on ferries.

Mr. SASAMURA (Committee Secretary) pointed out that that question was under study by IMCO's Maritime Safety Committee.

Mr. ROCQUEMONT (France) considered that the best thing would be to refer in paragraph 3 to the Convention for the Safety of Life at Sea so that any amendment of the definition contained in that Convention would entail the same amendment in the convention on tonnage measurement.

Mr. RUSSEL (South Africa) raised the question of the families of crew members, who should not be counted as passengers, in his opinion.

Mr. KING (Kuwait) said that the carriage of such family members should be authorised in conformity with the Safety Convention and that they should be considered as part of the crew. The same applied to cattlemen accompanying cargoes of cattle.

Mr. WILSON (UK), supported by Mr. GUPTA (India), recognized that the families of crew members presented a problem but did not think there was any need to mention them in the definition of passengers.

The CHAIRMAN proposed that the definition in the Safety Convention should be kept, with a recommendation that any interpretation of that definition given by IMCO should apply automatically to the convention on tonnage measurement.

Mr. LEIBENFROST (Yugoslavia) enquired whether the pilot's cabin was included in the crew space.

Mr. MILEWSKI (Poland) pointed out that if Regulation 2 contained a definition of passenger ships (ships issued with a special certificate and carrying more than 12 passengers), all other ships would automatically be cargo ships, whether or not they carried persons other than the members of the crew.

Mr. HABACHI (Suez Canal Authority) raised the question of spaces used by cadets, technicians and other persons on training ships.

The CHAIRMAN, replying to the Polish representative, observed that if, in the net tonnage formula which took account of the number of passengers, the factor N only appeared when it exceeded 12, that formula would automatically apply to passenger ships only and a definition of the latter therefore became superfluous. It would accordingly be advisable to await the report of the Working Group before taking a decision in the matter.

Mr. ROSELL (Denmark) referring to the question of training ships, said he thought that cadets were generally included in the crew.

Mr. MURRAY SMITH (UK) thought that cadets on training ships would be better classified as special trade passengers, the definition of which could be applied to those ships as well as to SIMLA ships, since the cabins contained more than eight persons and the space per person was far less than on passenger ships. An intermediate category could be included but he thought that would complicate the definition unnecessarily.

The CHAIRMAN agreed, particularly in view of the fact that the formula at present envisaged was very approximate in regard to the number of unberthed passengers.

Mr. GUPTA (India) said that the matter was under consideration in the Committee on the Revision of the Simla Rules, which was to meet shortly. It was that Committee which, in view of the trend towards the improvement of the travel conditions of what used to be known as "deck passengers" (nowadays "unberthed passengers"), had laid down a maximum of 8 persons and it would be preferable to retain that figure in the definition in paragraph (4). Moreover, the ratio $\frac{N}{T}$ which the Working Group proposed for unberthed passengers in the net tonnage formula, was entirely satisfactory.

Mr. LILEWSKI (Poland), referring to training ships, said that in Poland cadets were included in the crew list.

Mr. HABACHI (Suez Canal Authority) considered that the Working Group should nevertheless provide for the case of special ships such as training ships, hospital ships, scientific research ships, etc.

Mr. MURRAY SMITH (UK) drew the Committee's attention to the considerable variations in the volume of space per passenger in different types of ship. If the Working Group adopted the net tonnage formula which took account of the number of passengers, it would be essential to establish a gradation of the volume of space per passenger within the category of unberthed passengers.

The CHAIRMAN proposed that the Committee approve paragraphs (3) and (4) of Regulation 2 in principle, on the understanding

that it might be necessary to include a more precise definition of unberthed passengers.

It was so decided.

Regulation 2, paragraph 5

Mr. CHRISTIANSEN (Norway) pointed out that the text in question had in fact been considered and approved by the Sub-Committee.

Mr. KING (Kuwait) felt that the case of unberthed passengers was covered by the last sentence of the paragraph.

The CHAIRMAN said that according to the parameter selected - volume of passenger-space or number of berthed and unberthed passengers - the Committee should incorporate in the Convention either paragraphs 3 and 4 or paragraph 5.

Mr. ROSELL (Denmark) said that passenger spaces should be spaces reserved exclusively for passengers and should not be confused with crew spaces.

Mr. GUPTA (India) did not agree with the representative of Kuwait that the last sentence of paragraph 5 covered the case of unberthed passengers. That argument might perhaps have been valid twenty years earlier, when deck passengers only were involved, but since then the carriage of unberthed passengers had been greatly extended and a continually increasing number of passengers were carried stowage. It was not, therefore, possible arbitrarily to exclude all those spaces from the passenger spaces.

Preliminary results of the Working Group's calculations

Mr. ERIKSSON (Sweden) explained that the Working Group had held a brief meeting the previous evening, and had resumed its work that morning. Hence the second part of its report would not be submitted to the Committee till later. He would, however, give a summary of the results reached by the Working Group.

The Group had dealt with water ballast corrections and passenger corrections, and had endeavoured to obtain figures as close as possible to the existing figures. He drew the Committee's attention to the results obtained by the computer study, shown on the blackboard, in the form of the table reproduced below.

In this table the calculations in the first column were based on information from the IMCO fleet and those in the second column on all categories of ship other than passenger ships:

516 ships

NT = 0.29 ∇ - 0.21 WB	NT = A (∇ - WB)
	A.2953
Retained 486	482
Mean deviation 1.651	3.429
SD _o 16.701	18.536
SD _m 16.619	18.216
Fleet percent- age change 9.882	12.099

In regard to water ballast, the Working Group had taken information supplied by the delegations of the United Kingdom and Japan as a basis for establishing an average ratio between the deductible volume of water ballast (shown hitherto on international certificates) and the total volume of water ballast for the various categories of ship.

With regard to passengers, the Working Group had concluded that there must be a correction factor for passengers if it was desired to obtain figures not too far removed from the existing figures. The calculations showed that the mean deviation was still 15.73. The Working Group was therefore continuing its studies.

Finally, with regard to the lower limit of net tonnage, computer calculations had shown that 22 ships would have a net tonnage less than 0.23 of the gross tonnage if no such limit were fixed.

He added that at the end of the morning the Working Group would be able to communicate the results of other computer calculations now being carried out.

Mr. KELLY (USA), replying to Mr. GUPTA (India) explained how the Working Group had established its average ratio between the deductible volume of water ballast and the total volume.

The CHAIRMAN suggested that the Committee should continue its consideration of the results produced by the Working Group and then vote as to whether the plenary Conference should be asked to extend the Committee's terms of reference, to allow it to seek other formulae based on other parameters.

Mr. VAUGHN (Liberia) said he was in favour of that procedure, with a roll-call vote.

Mr. MURPHY (USA) said he considered, after examining the results obtained, that better ones could be obtained. Both the formulae applied had certain defects and might cause confusion. He supported the proposal made the previous day by the United Kingdom representative that the terms of reference of the Technical Committee should be extended. It would be regrettable, however, if all the work which had been done and which was summarized in document TM/CONF/WP.5, was to be taken up again. It would be better to reconsider only paragraph 1(c) of that document, in which displacement was adopted for calculating net tonnage.

Mr. ROCQUEMONT (France) said he had found the results given by the representative of Sweden very interesting. The table appeared to show that the calculations made by the Working Group in an effort to improve the standard deviation were on the right road. It was essential to bring net tonnages as close as possible to the existing values. In his view the application of other parameters would give no better results. Any formula which used the volume of passenger space would give unrepresentative results. Moreover, the use of a formula based on certain volumes of the gross tonnage would produce results differing considerably from the present net tonnages. He invited the Committee to refer to document TM/CONF/C.2/3,

submitted by the United States delegation, and in particular to column B of Appendix III, which showed mean deviations of 17.92 and 15.94 respectively. Better results could also be obtained with the formulae indicated in the table, in which the mean deviations were about 15%, which was not unreasonable. It was therefore unnecessary, in his view, to re-open the debate, especially as the Committee had little time left to complete its work.

Mr. WIE(Norway) said that a study of the Working Group's figures had not changed the opinion he had held on the previous day. He supported the view expressed by the representatives of Liberia and the United States.

Mr. PROSSER (UK) thanked the representative of Sweden for the results he had given to the Committee. On many points he shared the view of the representative of France. The proposed new formula seemed, however, to have certain practical advantages. If certain countries, such as the USSR, the United States, Norway, Japan and Liberia, which had large fleets, could use the formula envisaged hitherto, his delegation would be in favour of adopting the procedure indicated by the representative of France. If however, those countries preferred to calculate net tonnage on the basis of volume, the Conference could meet in plenary session to consider item 1(c) of document TM/CONF/WP.5.

The Committee should hear the views of the delegations of Japan and the USSR.

Mr. SOLDA (Italy) agreed with the representative of the United Kingdom.

Mr. WADA (Japan) considered that the deviations were too large, and he therefore supported the view expressed by the United States delegation.

Mr. PRIVALOV (USSR) said that his delegation was satisfied, to some extent, with the results obtained. It would, however, be a good thing to carry out further calculations before taking a final decision. An attempt should be made to draw up a comparative table for all ships on the basis of displacement and on the basis of volume, in order to find a unanimous solution to the problem.

Mr. DE JONG (Netherlands) shared the opinion of the French representative and feared that nothing would be achieved by following the new method suggested.

Mr. PROHASKA (Denmark) thought that if the Committee asked the Conference to change its terms of reference, the object must not be solely to consider the Norwegian proposal, but also to study the application of a volumetric parameter and to choose coefficients varying in accordance with the size of the ship.

Mr. MURPHY (USA) said that a two-thirds majority was not required for a change in the terms of reference.

The CHAIRMAN confirmed that under Rule 45 of the rules of procedure a simple majority was enough.

The object of the proposal was to ask the Conference to authorize the Committee to study a formula for net tonnage based on the volume of cargo spaces and passenger spaces.

A roll-call vote was taken.

Ghana, having been drawn by lot by the Chairman, was called upon to vote first.

The result of the vote was as follows:

In favour:

Ghana, Greece, India, Indonesia, Ireland, Israel, Italy, Japan, Kuwait, Liberia, Mexico, New Zealand, Nigeria,

Norway, Pakistan, Philippines, Poland, South Africa, Sweden, Union of Soviet Socialist Republics, United Arab Republic, United Kingdom of Great Britain and Northern Ireland, United States of America, Venezuela, Yugoslavia, Argentina, Australia, Bulgaria, Canada, China, Czechoslovakia, Denmark, Federal Republic of Germany, Finland.

Against:

Netherlands, Portugal, Spain, Belgium, Brazil, France.

The proposal was adopted by 34 votes to 6.

The CHAIRMAN said that the results of the vote would be communicated at once to the Conference, which would decide in plenary session whether or not to change the Committee's terms of reference as requested.

The meeting rose at 12 noon.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE SIXTEENTH MEETING
held at Church House, Westminster, London, S.W.1,
on Tuesday, 10 June 1969, at 2.35 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6;
TM/CONF/C.2/2; TM/CONF/C.2/WP.19 - WP.25)
(continued)

Mr. CHRISTIANSEN (Norway) submitted for the Committee's consideration the following volumetric formula to be used for the calculation of net tonnage:

$$NT = A(C + H) \frac{D}{D_{LL}} + B \times P$$

where:

- A = coefficient
- C = the moulded volume in cubic metres of the ship's cargo spaces
- H = the moulded volume in cubic metres of hatchways and hatchway trunks leading directly to the cargo spaces
- D = ship's displacement, draught or freeboard
- D_{LL} = displacement, draught or freeboard corresponding to the maximum summer load line under the International Load Line Convention in force
- P = passenger spaces
- B = coefficient.

The Committee might consider it simpler to include the factor "H" in the factor "C", and he would have no objection to that course.

The following limit should be considered:

$$NT \geq 0.30 \text{ GT}$$

The CHAIRMAN invited comments on the new formula which, if accepted by the Committee as a possible alternative, would be passed on immediately to the Working Group for further investigation, with a view to determining the coefficients "A" and "B" to the minimum standard variation about the mean.

It should be noted that, if draught or freeboard was substituted for displacement, " D_{LL} " would represent the minimum freeboard or the maximum draught assigned under the International Load Line Convention and "D", the actual draught or freeboard. Secondly, consideration would eventually have to be given to the choice of an alternative value, in the case of passenger ships, for $B \times P$. The following formula should then be considered:

$$\left(1 + \frac{D}{10000}\right) \left(N_b + \frac{N_u}{10}\right)$$

where N_b = Number of berthed passengers and

N_u = Number of unberthed passengers.

Mr. ROCQUEMONT (France) asked whether the factor "C" would comprise all spaces used for the carriage of cargo, including those used only occasionally for that purpose; he had in mind, in particular, tanks that might be used either for the carriage of liquid cargo or for water ballast.

Secondly, the factor " D_{LL} " would, he thought require authorities to determine scantling freeboard in order to comply with Regulation 1 of the Load Line Convention, in which case difficulties of interpretation might arise.

Mr. CHRISTIANSEN (Norway) confirmed that the factor "C" was intended to cover all cargo spaces, including tanks for the carriage of liquid cargo; obviously, tanks for water ballast were outside that category.

The ship with the scantling freeboard also had an assigned minimum freeboard so that the formula would still be valid where the owner wanted to obtain a reduced freeboard.

The CHAIRMAN pointed out that the concept of displacement as used under the new formula was the same as that applied in Proposal C, so that the question of scantling freeboard need not be a matter of special concern.

Mr. MURRAY SMITH (UK) said he was somewhat confused as a result of the explanations given. According to the Chairman's interpretation, the factor " D_{LL} " could be a completely fictitious value inasmuch as it could be based on sheer geometry without regard to hull strength. It would be unwise, he would have thought, to use as one part of the ratio a displacement that would never be obtainable by the ship. His understanding was that the ratio was intended to take into account the shelter-deck concept by relating two extremes of practical displacement; in other words, " D_{LL} " would represent the deepest draught permitted under the Load Line Convention having regard to geometric form and scantlings, whereas "D" would represent the displacement selected by the owner as the draught advantageous to him to be applicable for a specified period of time.

The CHAIRMAN said that the point he had had in mind related to the retention of the shelter-deck concept. It was general practice for a ship to be built for operation in a particular trade throughout its whole lifetime and the trade concerned would determine the scantling strength needed. The prospective Convention should not require a ship to have greater scantling than that needed for the minimum draught.

Mr. MURRAY SMITH (UK) suggested that, for the kind of ship the Chairman had in mind, "D" would be equal to " D_{LL} " and the factor would be unity.

Mr. OVERGAAUW (Netherlands) said that his delegation had no objection to the new formula, which represented a step in the right direction. He would merely ask, in view of the introduction of the coefficient "A", whether the spaces represented by "C" and "H" would be measured to moulded lines, even in the case of insulated spaces.

Mr. ROCQUEMONT (France) said he was under the impression that there was no agreement between the Chairman and the United Kingdom concerning the term to be used as denominator, and the matter should be cleared up for the benefit of the Working Group. If, as the United Kingdom suggested, actual displacement was to be selected, authorities would be bound, in order to comply with Regulation 1 of the Load Line Convention, to determine scantling freeboard, a calculation that would require application of the rules of the classification societies. That would raise a problem, irrespective of whether or not reference could be made in the Convention to those rules.

Secondly, both the interpretations given would require authorities to determine geometric freeboard and he was doubtful whether they would dispose of agents trained for that purpose.

Mr. CHRISTIANSEN (Norway) thought the matter was in fact quite simple; the classification societies could be asked to determine the load line mark the ship would be assigned in the absence of such scantlings.

The point raised by the Netherlands was one that was open to discussion.

Professor PROHASKA (Denmark) suggested that France's point would be met by using the coefficient definition proposed by his delegation in connexion with gross tonnage measurement (see TM/CONF/C.2/WP.10, p.2), suitably amended.

The CHAIRMAN thought it a pity that the factor "D_{LL}" should be made to depend on scantling strength, for that would mean that scantling freeboard would also have to be determined, a matter of some difficulty having regard to the differences in the rules of the classification societies. Secondly, it would force the owner of a ship being built to operate throughout its lifetime at a light draught to add heavier scantling simply to obtain a reduced tonnage.

Professor PROHASKA (Denmark) failed to see wherein the problem lay. The classification society would determine the minimum freeboard under the Load Line Convention at the stage of ship design; the question of scantlings would arise only in the event of an owner wanting at a later stage to obtain a reduced freeboard.

Mr. MURRAY SMITH (UK) agreed that the interpretation given by the Chairman and Denmark would simplify matters; on the other hand it would mean that one factor in the ratio would be completely unreal and he was doubtful of the need for maintaining such a factor simply to cover the case cited.

Mr. SOLDA (Italy) and Mr MILCH (Israel) affirmed the need for retaining the factor in question. Mr Milch added that, in any case, there was no problem for the Working Group, since it was only displacement for open or closed shelter-deck ships that was in question; "D" represented the minimum displacement in the open condition and "D_{LL}" the maximum displacement in the closed condition. Those definitions were amply clear.

Mr. VLASIC (Yugoslavia) said that, in the light of the Chairman's explanations, he would propose adding to the definition of "D_{LL}" the words "irrespective of the ship's scantlings".

The CHAIRMAN thought the point might be met by adopting either the Yugoslav or the Danish Proposal.

It would seem that all necessary points had been cleared up for the guidance of the Working Group. The Working Group would have at its disposal the data submitted in a number of working papers covering, inter alia, results relative to "P" in terms of volume and in terms of passenger number.

Professor PROHASKA (Denmark) pointed out that the data available in terms of volume was based on a limited number of passenger ships only.

Mr. MURRAY SMITH (UK) said that his delegation had prepared data using for the ratio draught and freeboard in addition to displacement. It had found that the biggest differential resulted in comparison of freeboards. The Working Group might decide that a relationship between freeboard in open condition and freeboard in closed condition would be preferable to a relationship between either of the other two parameters for the purpose of obtaining the closest approximation to existing net tonnage figures. The data, in the form of a table, was at the Committee's disposal.

The CHAIRMAN thought the Working Group should be asked carefully to check results in respect to passenger ships, especially large-sized ones, for if freeboard instead of displacement or draught was used, the ratio might have to be reduced to get approximate figures for that class of ship.

In answer to a point raised by Professor Prohaska (Denmark) he said that the Italian delegation had available certain data on passenger ship freeboard which would be at the disposal of the Working Group.

Mr. ROCQUEMONT (France) agreed with the Danish representative that it would be difficult to evaluate the corrective coefficient on the basis of passenger ships because of the lack of data on geometric freeboard for that class. In France, the practice in the case of such vessels was to take account only of subdivision freeboard.

The CHAIRMAN pointed out that for passenger ships the factor "P" would be predominant, i.e. the cargo space would be small in relation to the total passenger space. The Working Group should endeavour to obtain as much data as possible to serve as a basis for final conclusions.

He proposed that the Working Group should be asked to proceed immediately with the work of investigating the new formula proposed by Norway on the lines suggested in the discussion and on the understanding that an additional sub-group might be set up if deemed necessary.

It was so agreed

First Draft of Regulations for Determining Gross and Net Tonnages of Ships (TM/CONF/C.2/WP.22) (Continued)

The CHAIRMAN re-opened the discussion on "Passenger Space" (Regulation 2, paragraph 5).

Mr. ROCQUEMONT (France) drew attention to the list of "spaces used or intended to be used as public spaces for passengers" and asked whether it was to be assumed that passenger kitchens, galleys, pantries and service rooms were to be included.

Secondly, citing the stipulation that "promenade decks on and above the upper deck and other similar spaces not served by the ship's interior heating and ventilation systems" were not to be included in passenger spaces, he asked whether, in view of Regulation 3 on gross tonnage, there was any need to define such "weather decks". He pointed out that if such spaces were to be enclosed and became liable for inclusion in the gross tonnage formula they would not then be considered passenger spaces, whereas if they were enclosed and as such became passenger spaces, they would then be exempt from gross tonnage, if the appropriate formula were to be adopted.

As regards the "ships interior heating and ventilating systems" themselves, he asked whether, if those were not to be considered passenger spaces, they would be included in the gross tonnage. In short, a reappraisal of Regulation 3 and Definition 5 was called for.

Mr. CHRISTIANSEN (Norway) observed that the tonnage concept had always been that a space could not be included for calculation in the net tonnage unless it was also included in the gross tonnage. The same therefore applied to passenger spaces, whether open or closed.

Mr. GUPTA (India) stated that the present practice was to consider promenade and weather decks as necessary spaces for the exercise of onboard passengers berthed in the lower or upper tween decks. In fair seasons, passengers might also travel on weather decks providing that sufficient space still remained for the original purpose of those decks. In the special trade ships, therefore, such spaces were truly passenger spaces and, being two-dimensional, had never been involved in the measurement of tonnage, either gross or net.

Mr. WILSON (UK) said that his delegation believed that such rooms as passenger galleys, pantries, etc. should be exempted only if used exclusively for the passengers; it had taken the clause "passenger dining rooms, and other similar spaces associated therewith" to signify such galleys, kitchens and pantries.

It further considered that such spaces as passageways used for both crew and passengers, for instance, those leading to sleeping accommodation and mess rooms, should not be considered as passenger space.

Mr. ROCQUEMONT (France) observed that since the galleys, kitchens, etc. in general occupied more space than the others specified in the text, they should be included at the top of the list of exempted spaces.

The CHAIRMAN proposed, in response to the first point raised by the delegation of France, that passenger galleys, pantries, kitchens, etc. should be included specifically in the list of exempted spaces, when the text of Definition (5) was redrafted.

It was so agreed.

Mr. WILSON (UK), returning to the second point originally raised by the delegation of France, agreed that certain glassed-in passenger spaces without heating or ventilation which had traditionally always been exempt from measurement would, under draft Regulation 3, become included in the gross tonnage. He suggested that Regulation 4 could rectify the situation with a stipulation that any space to be included in the net tonnage should first be included in the gross.

Mr. BONN (Canada) asked whether, for instance, a steward's room located within the passenger accommodation would render all the adjoining passageways non-eligible for exemption.

Mr. NOZIGLIA (Argentina) noted that since the passenger term in the net tonnage was positive it should be made as small as possible, which could be done by stipulating that such spaces were to be for the exclusive use of passengers, with the interspersion of spaces for stewards, etc; the latter would, however, lead to artificial distributions of cabins in order to render passageways exempt.

Mr. CHRISTIANSEN (Norway) pointed out that it was unavoidable that certain crew lockers containing stores were located in passageways within the passenger accommodation but that since such stores would be for the service of the passengers there was no question of those passageways ceasing to be classified as passenger space.

Mr. WILSON (UK) explained that his delegation wished the clause qualifying the term "promenade deck" to be removed so that the last sentence would read: "Service and crew areas shall not be included in passenger spaces".

Mr. KING (Kuwait) suggested that the word "exclusively" be included after "used" in the first line of the paragraph.

Mr. NOZIGLIA (Argentina) proposed that instead the word "primarily" or "ordinarily" be added, to cover the case where small spaces for crew use were interspersed throughout the passenger accommodation.

Mr. VLASIC (Yugoslavia) asked whether in that case a galley used primarily for passengers but also for crew would be included or excluded in the definition.

Mr. BORG (Sweden) said that his delegation preferred the word "exclusively".

Mr. CABARIBERE (France), supported by Mr. MURRAY SMITH (UK), believed that the whole definition should be redrafted so as to take specific account of spaces used exclusively for passengers, such as certain passageways and services, and ones used primarily for passengers or jointly for passengers and crew.

The CHAIRMAN proposed that a small drafting group, consisting of a maximum of four members and including a representative each for France, United Kingdom and USSR, be set up to deal with the matter of passenger spaces for exclusive and joint use. The matter of passenger galleys etc, and the United Kingdom proposal for deletion in the last sentence.

It was so agreed.

The CHAIRMAN recommended that, in view of the difficulties arising, if the Working Group were to find that a formula including passenger number only were reasonably adequate, the Committee should immediately drop all discussion of definition of passenger space.

He then opened the discussion on Water ballast spaces (Regulation 2, paragraph 6 - TM/CONF/C.2/WP.22).

Mr. GUPTA (India) observed that the term "water ballast spaces" had been variously interpreted in the past; he strongly hoped that in the final drafting of that definition the Committee would take care to ensure that there was no longer any room for manipulation.

Mr. ROCQUEMONT (France) suggested that a clause be added to provide that in a case where water ballast spaces were used to carry cargo, they would be excluded permanently from exemption.

The CHAIRMAN suggested that that case was covered by the word "exclusively" in the first line.

The CHAIRMAN said that the wording referred to by the representative of France, which had been included on the proposal of the UK delegation, appeared in item (4) on page 8 of document TM/CONF/C.2/WP.22.

Mr. WILSON (UK) said that the point made by the representatives of France and India was covered by the text as it stood; the opening line referred to space used "exclusively" for carrying water ballast; and the first line of sub-paragraph (ii) specified that the space should be "solely" adapted for water ballast.

The Indian representative's difficulty had perhaps arisen from the tendency in recent times to depart from the classic concept of exclusiveness of water ballast spaces, and to take into account other uses, such as fresh water. The problem would not arise, however, unless water ballast was incorporated in a formula. In that event the principle of exclusive use would have to be applied because double-bottomed tanks frequently had a dual use.

In connexion with sub-paragraph (ii) he suggested that the words "motor" in the fourth line should be replaced by the word "engine".

Mr. GUPTA (India) thanked the United Kingdom representative for his explanation. The tonnage regulations of most countries had always included provisions similar to those set out on pages 6 and 7, but that had not prevented serious manipulations. It was essential to guard against such practices in the future. He suggested that if the water ballast concept were included in the new formula, a limit should be set to the total reduction allowed for water ballast.

Mr. CHRISTIANSEN (Norway) instanced the case of a ship carrying cattle or sheep, where all the tanks had to be filled with fresh water. Would such tanks have to be treated as cargo spaces thereafter?

Mr. GRUNER (Finland) said that the question of fresh water did not arise, since water ballast taken from a river would be fresh.

Mr. ROSELL (Denmark) supported the Indian representative's suggestion. It was easy for engineers to alter pipe lines to enable spaces to be used for other than the certified purpose. He also suggested that provision should be made for fixed ballast, which was carried on many passenger and cargo ships.

The CHAIRMAN pointed out that fixed ballast was not relevant to the present discussion. The Committee was trying to prepare a definition of water ballast in case it was included in the formula produced by the Working Group.

Mr. NOZIGLIA (Argentina) said that in Argentine ships, a considerable number of which carried cattle and sheep cargoes, double-bottomed tanks were used for both water ballast and drinking water.

Mr. CHRISTIANSEN (Norway) asked whether, in a ship having topside and other tanks as water spaces, removal of water ballast and pumping equipment, to provide more cargo space, would constitute a change in the ship's character and thus alter the tonnage.

Mr. WILSON (UK) said that he did not see the relevance of the Norwegian representative's point concerning water ballast on ships with cattle cargoes. The Committee was trying to define water ballast space for tonnage purposes and was not concerned with water ballast requirements for particular circumstances. The point was that water ballast spaces should be used exclusively for that purpose. If they were used for anything else the tonnage would have to be raised accordingly.

The CHAIRMAN said that the penalty stipulated in item (4) on page 8 would apply only if cargo were carried in a space certified as water ballast space. He asked if the Committee agreed to the addition at the end of item (6) - water ballast spaces - of wording to the effect that if water ballast space were found to be used for cargo, it should be included in the net tonnage until the ship had transferred to another flag or there had been a real change in ownership.

Mr. ROCQUEMONT (France), while agreeing to such an addition, suggested that the Committee should agree on the principle only at the present stage, since the wording would depend on whether the formula ultimately adopted included cargo volume or water ballast volume.

The CHAIRMAN pointed out that the addition would be needed only for a formula which included water ballast volume.

Mr. ROCQUEMONT (France) said that if the formula on the blackboard were adopted, it would be necessary to define C (cargo spaces) and perhaps also water ballast space used both for water ballast and for cargo.

The CHAIRMAN drew attention to the definition of cargo spaces in paragraph (2) of document TM/CONF/C.2/WP.25, submitted by Norway, which he suggested might be discussed at a later stage. For the present purpose the Committee should be very specific, since it was preparing a definition for use in a formula with water ballast deduction. He suggested that the Drafting Committee should be requested to prepare an addition to item 6 on the following lines: "If a ship is discovered with any space officially certified as water ballast space filled with cargo, that space shall no longer appear on the tonnage certificate as a deduction from net tonnage."

It was so agreed.

Mr. GUPTA (India) said that, to avoid future difficulties, water ballast spaces should be very clearly specified on the tonnage certificate.

The CHAIRMAN suggested that the Committee, jointly with the General Committee, should set up a small working group on the tonnage certificate to prepare a number of possible alternatives.

It was so agreed.

Mr. UGLAND (Norway), referring to the Danish representative's comments on other types of ballast, suggested that the heading of item (6) should be amended to "Ballast Spaces", and that the necessary consequential changes should be made in the text.

The CHAIRMAN said that such an amendment was inappropriate at the present stage, as a definition of water ballast spaces was required in connexion with the formula. The question of solid ballast should not be discussed until it was certain that it would be required.

He invited attention to sub-paragraph (iii) (2), item (1) having already been considered.

Mr. BECKWITH (Liberia) proposed that the words "separated off" at the end of the second line should be replaced by the word "contained".

The CHAIRMAN suggested that the matter should be referred to the drafting committee.

It was so agreed.

Following a question by Mr. ROSELL (Denmark) as to the meaning of "awnings", Mr. KING (Kuwait) suggested that the words "either fixed or portable" should be inserted after the word "awnings" at the end of the third line.

Mr. WILSON (UK) said that he would have no objection to the insertion of the words "fixed or portable" before the word "awnings", although they were superfluous.

Mr. VUURSTEEN (Netherlands) did not understand the relevance of the words "or fixed or portable partitions" which followed.

The CHAIRMAN suggested that the word "by" should be inserted before the words "or fixed or portable partitions".

It was so agreed.

The Committee approved the amendment of Kuwait: the insertion of the words "fixed or movable" after the word "awnings" in the third line.

The CHAIRMAN recalled that a question had been raised concerning the words "stores" in the fourth line of item (3). He suggested that the drafting group should be requested to revise the wording so as to avoid any reference to the part of the deck between the poop and the bridge, since this area would be considered as a closed space if a propeller was installed there.

It was so agreed.

Mr. VUURSTEEN (Netherlands), illustrating his point by a diagram, proposed that the words "side to side" should be inserted before the word "erections" in the first line of subparagraph (3) (a)(iii). Otherwise, there might not be an empty space between the two erections and the volume of the entire erections would have to be included in the total volume of enclosed spaces.

Mr. WILSON (UK) supported the proposal.

Mr. CABARIBERE (France) said that it might be necessary to specify a minimum distance between the erection and the fore-castle or an entirely different side to side erection, such as bridge or poop. Otherwise the intervening space might be closed.

Mr. WILSON (UK) said that for existing ships, under the Panama Canal rules, anything other than a hatch would invalidate the exemption.

Mr. HAMLIN (Observer, Panama Canal Company), speaking at the invitation of the Chairman, said that there would be no problem with a hatch, which, under the Panama Canal regulations, was not regarded as an erection.

Mr. HABACHI (Observer, Suez Canal Authority), speaking at the invitation of the Chairman, supported the amendment. He also drew attention to the comments on document TM/CONF/C.2/WP.14 recorded in document TM/CONF/C.2/SR.13.

It was agreed to insert the words "side to side" before the word "erections" in the first line of sub-paragraph (3)(a)(iii).

The meeting rose at 5.35 p.m.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE SEVENTEENTH MEETING

held at Church House, Westminster, London, S.W.1,
on Wednesday, 11 June 1969, at 9.35 a.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT AND
TONNAGE CERTIFICATES (TM/CONF/6; TM/CONF/C.2/WP.16;
TM/CONF/C.2/WP.20; TM/CONF/C.2/WP.22;
TM/CONF/C.2/WP.27)(continued)

Regulation 3 (TM/CONF/C.2/WP.22)

Paragraph 3

Sub-paragraph (a)

The CHAIRMAN invited the Committee to resume consideration of document TM/CONF/C.2/WP.22, beginning with paragraph 3 of Regulation 3, on page 5.

He reminded the Committee that there had been a proposal to insert the words "side to side" before the word "erections" in the first line of sub-paragraph (3)(a)(iii). It was not certain, however, that that was really what the Committee wanted and that, where there were two separate deck-houses close together, their volume should be deducted.

Mr. HABACHI (Suez Canal) considered that the separation to which the sub-paragraph referred applied only to superstructures and not to deck-houses.

Mr. CABARIBERE (France) said that what was meant by "an open well" in the first line of sub-paragraph (iii) was a space bounded on four sides, which implied two erections joined by a complete bulwark, and it was therefore unnecessary, in his view, to state that the two erections must extend from side to side, although he saw no objection to the statement. He considered, however, that a new sub-paragraph (iv) should be inserted, worded on the following lines: "No erection or part of an erection may be constructed at a distance less than $\frac{1}{2}$ from the opening which would permit a space to be considered as not being an enclosed space". He illustrated the reason for the amendment by a sketch on the blackboard.

Mr. WILSON (UK) supported by Mr. CHRISTIANSEN (Norway) agreed with the representative of France. The concept of a space between erections ought to correspond to an "open well", but in the case illustrated by the blackboard sketch there was no longer an "open well", and that space could not, therefore, be exempted from measurement.

He also pointed out a printing error in the fourth and fifth lines of the English text where the correct reading should be "breadth of the end opening".

The CHAIRMAN, summing up, said that the Drafting Group would have to insert the words "side to side" before the word "erections" in the first line of sub-paragraph (3)(a)(iii), and add a sub-paragraph (iv) proposed by the French delegation. He mentioned that the United States delegation had indicated its willingness to participate in the Drafting Group.

Sub-paragraphs (b) and (c)

The CHAIRMAN wondered whether it was necessary to distinguish between sub-paragraphs (b) and (c) and he referred the Committee to the figures illustrating Regulation 6, in Appendix III on page 153 of document TM/CONF/6.

Mr. WILSON (UK) thought that figure 1 of Appendix III applied to sub-paragraph (b) and figure 2 to sub-paragraph (c) and that, according to those figures, two different concepts were involved.

The CHAIRMAN reminded the Committee that it had decided to define a "side to side erection" and he requested the Drafting Group to devise such a definition.

Sub-paragraph (d)

Mr. CABARIBERE (France) pointed out an error in the third line of the French text. It was actually the opening which was exposed and not the deck, and the wording of that sub-paragraph would have to be revised. The English text could also be improved to clarify this point.

Mr. GUPTA (India) wondered whether those provisions applied to the wide lateral openings for ventilation and light in pilgrim ships.

Mr. HABACHI (Suez Canal Authority) considered that the spaces in question must meet two conditions: they must be covered by a roof and they must be covered at the sides, otherwise the space should not be measured.

Mr. KING (Kuwait) mentioned swimming pools as an example of such spaces.

Mr. WILSON (UK) said that while that was indeed the best example, there were others, such as the sports decks on passenger ships, which were covered all round as a protection against the wind but which were open to the sky.

He could reassure the representative of India about pilgrim ships. There was no doubt that in their case the space in question would be exempt from measurement.

The CHAIRMAN stated that only drafting changes would be made to sub-paragraph (d).

Mr. CHRISTIANSEN (Norway) referred the Committee to the Oslo Rules, which contained a clear definition of the case in question.

Sub-paragraph (e)

The CHAIRMAN pointed out that on the previous day the question had been raised of inserting the words "side to side" in the first line of that sub-paragraph. He thought, however, that that was no longer necessary, and he asked whether the Committee could agree to keep the text of sub-paragraph (e) as set out in document TM/CONF/C.2/WP.22.

It was so decided.

Paragraph 4

Mr. ROCQUEMONT (France) drew the Committee's attention to document TM/CONF/C.2/WP.20, submitted by the French delegation. The proposal was to insert a new paragraph 4 (the present paragraph 4 then becoming paragraph 5) setting out the principle that in no case could the volume below the freeboard deck or the volume of the superstructures be excluded from the total volume.

The CHAIRMAN asked whether the reference should be to "superstructures" or to "closed superstructures".

Mr. ROCQUEMONT (France) said that the Load Line Convention gave a definition of "superstructures" but that in his view closed superstructures were involved.

The CHAIRMAN read out the definition given in the Load Line Convention and invited the Committee to consider the question.

Mr. MUNTZ (Netherlands) thought that the provisions of paragraph 4 should be included in Article 3 rather than in Regulation 3.

Mr. WILSON (UK) opposed the inclusion of TM/CONF/C.2/WP.20 in the existing text for two reasons: in the first place, it seemed to him to serve no useful purpose, and secondly, the Committee should as far as possible avoid referring in the text

to the Load Line Convention. Such a connexion between the two Conventions might in fact cause difficulties in practice.

Mr. FILIPPOVITCH (USSR), Mr. CHRISTIANSEN (Norway), Mr. GUPTA (India), Mr. BORG (Sweden), and Mr. MUNTZ (Netherlands) agreed with the United Kingdom representative.

Mr. ROCQUEMONT (France) said he was prepared to withdraw his proposal. A number of delegations appeared to be in agreement on the point, and he had noted the arguments presented against his proposal.

Mr. SOLDA (Italy) considered it generally advisable for the two Conventions to be independent of each other, although that principle could not be absolute.

The CHAIRMAN stated that the Committee wished to keep paragraph (4) as drafted in TM/CONF/C.2/WP.22, but that one delegation had felt that paragraph (4) should be incorporated in an Article instead.

Regulation 2

Mr. CARARIBERE (France), reverting to the question of water ballast spaces, said he thought paragraph (6) of Regulation 2 should specify that the water ballast spaces to be incorporated in the formula for net tonnage would not include those situated in the double bottom.

The CHAIRMAN drew the Committee's attention, in that connexion, to the new definitions prepared by the Drafting Group (TM/CONF/C.2/WP.27) which modified certain paragraphs of the draft of Regulation 2 contained in document TM/CONF/C.2/WP.22. He thought it preferable to postpone consideration of that document until the next meeting but suggested that the words "or change of trade approved by the Administration" be inserted at the end of the last paragraph relating to water ballast space.

Regulation 4, (3)

The CHAIRMAN stated that paragraph (3) was applicable both to the Norwegian Proposal and to net tonnage determined on the basis of displacement. The Committee could therefore discuss it forthwith.

Mr. WILSON (UK) said he would like sub-paragraphs (i) and (ii) to make it clearer that, in the case of ships with two load lines, it was always the higher one that would be taken into consideration.

The CHAIRMAN observed that paragraph (3) of Regulation 5 covered that point.

Mr. GUPTA (India) said he was in favour of that principle, provided it was quite clear that net tonnage would be linked with conditions of operation.

Mr. ROSELL (Denmark) thought that paragraph (3) restricted the alteration of tonnage too much.

In regard to sub-paragraphs (iii) and (iv) of Regulation 4(3), he would prefer the reference to national requirements to appear in a separate recommendation (as in Recommendation 2 of the Convention on Load Lines) rather than in the actual text of the Convention.

The CHAIRMAN emphasized that those sub-paragraphs applied only to international voyages by ships which were not subject to the Convention on Load Lines in order not to penalise them by application of sub-paragraph (v), if this was the case.

In regard to paragraph (3) of Regulation 5, he reminded the Committee that it had only been discussed and no decision had been taken. The paragraph applied mainly to Indian ships which carried pilgrims and goods alternately and to certain Norwegian ships.

Mr. GUPTA (India) explaining the way in which Simla ships operated, said that, in general, they were only converted from passenger ships to cargo ships once a year because the pilgrimage season usually lasted between four and six months. He did not therefore think it necessary to specify a fixed delay for those ships; they could merely be exempted from the delay of twelve months.

Mr. SOLDA (Italy) did not see any need for such ships to obtain new certificates every time their tonnage changed, as it was principally the change in freeboard which was important, for safety reasons.

Mr. CUNNINGHAM (USA) drew the Committee's attention to the draft submitted by his delegation concerning alteration of net tonnage (TM/CONF/C.2/WP.16), in which the case of passenger ships converted to cargo ships was dealt with in sub-paragraph (c), which he thought would resolve the difficulty.

Mr. ROCQUEMONT (France) recalled that the question of exempting convertible passenger ships from the twelve month delay had arisen out of the problem of pilgrim ships. His delegation, while it was prepared to recognise the special situation of those ships, particularly as it also came within the purview of the Committee on the Revision of the Simla Rules, would not like the Committee to be sidetracked by that exemption into reconsidering the principle adopted by the Conference that changes in net tonnage should be infrequent. He therefore proposed that, apart from the exception in the case of Simla ships, which would have to be carefully defined, all other ships should be subject to the delay of a year, the highest tonnage being taken into consideration in the case of ships with two freeboards.

Mr. ROSELL (Denmark) said he was in favour of the United States proposal but would prefer the text to be less specific, because the conversion from a passenger ship into a cargo ship might not be complete or might not entail any modification.

Mr. NOZIGLIA (Argentina) supported the French proposal but wished to know what sort of change of freeboard was undergone by Simla ships.

Mr. GUPTA (India) stated that, at the moment, the variations were fairly slight but that such might not always be the case, due to the improvements incorporated in new ships. Although not opposed to the United States proposal, the Indian delegation therefore distinctly preferred the French proposal.

The CHAIRMAN pointed out that variations in the case of Simla ships would probably be fairly slight because the decrease in draught would doubtless be offset, in the determination of the tonnage, by the addition of passenger space. On the other hand, they might be much greater in the case of the Norwegian ships which operated alternately as cargo ships and ferries, or as passenger and cargo ships.

Mr. CHRISTIANSEN (Norway) stated that the deadweight tonnage of those ships could indeed be as much as 10,000 tons; during the summer, some of them carried both passengers and cargo (cars, for example) and the variations in tonnage could be as much as 900 to 1000 tons, which was a very considerable amount. In the case of those ships, therefore, he was in favour of reducing the delay between changes of tonnage to six months.

Mr. PRIVALOV (USSR) wondered whether it was not largely a matter of local shipping problems involving two or three countries rather than international shipping in general. If that were so, such problems would be better dealt with at a regional level and not within the framework of an international convention.

The CHAIRMAN stated that the problem was more far-reaching: for example, some Italian ships which carried passengers between Italy and Greece in summer, became cargo ships which travelled all over the world in winter.

He therefore called on the Committee to decide between the United States proposal (TM/CONF/C.2/WP.16), under which a ship could obtain a new net tonnage certificate every time it underwent conversion, and the French proposal, under which net tonnage could only be decreased once a year, except in the case of pilgrim ships.

Mr. ROCQUEMONT (France) did not think that a ship should be authorized to change its tonnage every time it changed its service. A shipowner might build a ship for 13 passengers, make provision for a very few bulkheads, well spaced and not very high; the load line would be very low, the passenger correction almost negligible and the figure for the net tonnage consequently higher. If the same ship were considered as a cargo ship, the load line would be lower, the figure for the net tonnage higher, and the result would be just what the Conference wished to avoid, namely, the existence of two net tonnages.

Mr. PEREIRA (Brazil) considered that, before giving its opinion on the amendments, the Committee should examine the net tonnage formula which was to be proposed by the Working Group. In any case, as the representative of France had said, too frequent changes of tonnage were to be avoided.

Mr. CONTOGEOGRIS (Greece) recalled that his delegation had proposed a time-limit of six months, and Norway one of four months. The Committee might take a decision later on the question of the time-limit, but it could not compel a ship which changed its type of service to wait twelve months before changing its tonnage.

The CHAIRMAN observed that no regulation of the Convention should encourage an owner to reduce the net tonnage of a ship at the expense of safety.

Mr. UGLAND (Norway) remarked that the observations by the representative of France referred only to Proposal C; under the Norwegian Proposal, the 'tween-deck was still considered as cargo space.

Mr. GUPTA (India) considered that there were two problems (according to whether the ship was operating as a cargo ship or as a passenger ship): one problem was that of load lines and the other that of the two tonnages.

Mr. ROCQUEMONT (France) said that if a ship changed its service, it must obviously have two load lines, but the tonnage should be fixed at its higher value, except in the case of pilgrim ships.

Mr. ROSELL (Denmark) and Mr. WILSON (UK) agreed with the representative of France.

Mr. MUNNICH (Federal Republic of Germany) thought that the time-limit could be six months, in order to allow ships which changed service seasonally to change their tonnage accordingly.

The CHAIRMAN put to the vote the proposal to reduce the time-limit of one year for changes in net tonnage.

The proposal was rejected by 18 votes to 11.

Mr. GUPTA (India) said he would like the exception applying to pilgrim ships to be included in the text of the Regulation.

Mr. ROCQUEMONT (France) pointed out that that exception appeared in the Convention for the Safety of Life at Sea.

The CHAIRMAN said that that question could be dealt with by the Drafting Group.

Regulation 5

Mr. CUNNINGHAM (USA) said that if modifications were regarded as major when they "result in the change of the gross tonnage of the ship by at least 10 per cent" (TM/CONF/C.2/WP.22), the mere removal of part of the deck-house on a large ship would be sufficient to change the gross tonnage. To obviate that disadvantage, the United States delegation had proposed a new text (TM/CONF/C.2/WP.16) under the terms of which the net tonnage could be decreased "when large structural alterations such as removal of a superstructure would require modification of the assigned freeboard".

The CHAIRMAN, replying to a question by Mr. MUENCH (Israel) said that the time-limit of 12 months specified in paragraph 2 (WP.22, page 10) was to be understood as from the date of the tonnage certificate.

Mr. ROCQUEMONT (France) said that if, by removing a hatch cover or some part of a cover, it was possible to change the gross tonnage by 10 per cent, then the regulations applicable to gross tonnage might usefully be reconsidered.

Mr. CHRISTIANSEN (Norway), Mr. BECKWITH (Liberia), Mr. BONN (Canada) and Mr. CONTOGEOGRIS (Greece) supported the United States proposal.

Mr. MUNTZ (Netherlands) also was in favour of the proposal, but suggested replacing the expression "large structural alterations" by "major structural alterations".

Mr. ROCQUEMONT (France) was also inclined to support the United States text, but the French delegation wished to reflect on the definition of gross tonnage to see whether that definition did not permit of reductions in tonnage which were in principle prohibited.

Mr. WILSON (UK) supported the United States proposal.

The draft Regulation 5 was approved, with the amendment submitted by the United States.

The CHAIRMAN said that the Drafting Group would be instructed to draw up the text which would then be submitted to the General Committee.

Regulation 6

Mr. WILSON (UK) proposed the following amendment: in the first paragraph, to replace the end of the sentence after "metal plating" by the following text "... and the outer surface of the shell in ships constituted of any other material", and, in the second paragraph, to replace the words "bulges in the ships sides" by the word "appendages", and the words "propeller bossings" by the word "shafts".

Mr. GUPTA (India) did not think that paragraph 2 served any useful purpose.

The CHAIRMAN, referring to the amendment proposed by the United Kingdom, said he thought that the use of the word "shell" might give rise to confusion.

Mr. WILSON (UK) agreed and said he was prepared to replace "shell" by "boundary bulkhead".

Mr. BECKWITH (Liberia) thought that in this Regulation a distinction should be drawn between the calculation of the gross tonnage and that of the net tonnage.

The CHAIRMAN pointed out that texts were being adopted provisionally; certain problems remained for solution later, for instance, that of the cargo spaces.

He invited the Committee to take a decision on the United Kingdom amendments.

The amendments proposed by the United Kingdom were approved.

Mr. MUNTZ (Netherlands) considered that spaces open to the sea, with a volume of less than 2 cubic metres, should be excluded from the total volume and from the displacement.

Mr. RICHARD (Sweden) thought it would be useful to define spaces open to the sea.

Mr. NOZIGLIA (Argentina) proposed that, in paragraph 3, the words "may be" should be replaced by "shall be".

Mr. WILSON (UK) thought that the formula should not be too positive.

The meeting rose at 12.35 p.m.



IMCO

FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE EIGHTEENTH MEETING
held at Church House, Westminster, London, S.W.1,
on Wednesday, 11 June 1969, at 2.40 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6 and Corr.1
and Add.1; TM/CONF/C.2/WP.22; TM/CONF/C.2/WP.27)
(continued)

The CHAIRMAN invited the Committee to continue its consideration of the first draft of regulations for determining gross and net tonnages of ships (TM/CONF/C.2/WP.22).

Regulation 6(1)

Mr. CHRISTIANSEN (Norway) pointed out that since, for ships other than those with metal plating, volumes and displacement included in the calculation of gross and net tonnages should be measured to the outer surface of plating, presumably the wooden planking would have to be included for wooden ships - of which Norway built large numbers.

Mr. SASAMURA (Committee Secretary) said that the wording had been taken from regulation 34 of the International Load Line Convention, 1966.

Mr. WILSON (UK) said that from his own experience, which was chiefly with large ships and glass fibre ships, the lines plan was suited to the mould, and an ordinate deducted for thickness of material. That was more satisfactory than a system of corrections.

Mr. ERIKSSON (Sweden) said that the normal method in designing wooden ships was to take the lines plan to the outside and deduct the planking.

Mr. JONES (New Zealand) confirmed that the method described by the Swedish representative was the general practice for wooden ships and also for those made of such materials as fibreglass.

Mr. NOZIGLIA (Argentina) pointed out that the words "may be excluded" in paragraph (3) would make it possible in the case of wooden ships, where the line was taken to the outside of the hull, for spaces such as open wells in dredgers to be included in the total volume and displacement. That would be disadvantageous.

Mr. ROCQUEMONT (France) agreed with the representative of Argentina. The wording of the Convention should be mandatory in order to ensure uniformity of measurement by the ratifying States. Otherwise ships of identical types might have different measurements in different countries.

Mr. SOLDA (Italy) suggested that the difficulty might be resolved if the volume to be taken into consideration were the ship's weight divided by the specific weight of seawater.

The CHAIRMAN said that there seemed to be no difference of opinion on the principle of the matter. He had understood at the previous meeting that the word "may" was to be retained in order to avoid complicating the calculation by detailing items whose weight was relatively insignificant.

Mr. KING (Kuwait) said that it would be better to keep the word "may". Substitution of the word "shall" would make it compulsory to list all the relevant items.

Mr. CHRISTIANSEN (Norway) proposed simplifying both paragraphs as follows: "(2) Volumes of appendages shall be included in the total volume and displacement;" and "(3) Volumes of spaces open to the sea may be excluded from the total volume and displacement."

Mr. GRUNER (Finland) supported the proposal. He also favoured retention of the word "may", since items such as sea chests would be of some significance for small ships.

Mr. GANTIOQUI (Philippines) said that he agreed with the Norwegian representative.

The CHAIRMAN asked if the Committee agreed that the word "may" in paragraph (3) should be retained and that paragraphs (2) and (3) should be amended in accordance with the Norwegian representative's proposal.

It was so agreed.

Regulation 7

Mr. CABARIBERE (France), referring in particular to paragraph (2), said that the methods of calculation should be set out in detail, so that there would be freedom of choice. He drew attention to the French proposals in documents TM/CONF/4, 5 and 6.

Mr. CHRISTIANSEN (Norway) supported the views of the French representative.

Mr. RUSSEL (South Africa) said that he, too, agreed with the French representative. The regulation in its present form would be unacceptable to the legal authorities in his country.

Mr. MUNTZ (Netherlands) said that he was opposed to over-detailed provisions, since there might be a variety of computer programmes or working practices among naval architects or shipyards. The most that could be done would be to stipulate a minimum number of cross-sections or of water lines from which displacement should be calculated.

Mr. WILSON (UK) agreed with the previous speaker. The UK authorities had devoted much time and thought to the standard methods for obtaining displacement or internal volume proposed

by France and the USSR and would have been ready to accept the latter, based on their standard method for hydrostatic calculation, if it had stated that other systems would be acceptable if they gave a result within a stated percentage of that obtained with the proposed method. Unfortunately, tests in the United Kingdom had shown differences of as much as $1\frac{1}{2}$ per cent from the USSR proposal.

His delegation hoped that the Conference would produce a simple system which would abolish much of the drudgery of existing tonnage measurement.

There was no need, for example, to measure the underdeck by a separate method: the displacement given by builders was universally accepted without question because their methods produced results that varied very little. The Committee should pursue its efforts to find an acceptable method of calculating displacement which could be applied for tonnage purposes.

The CHAIRMAN said that there were three possibilities arising out of the discussions: to keep the regulation as it was; to adopt the French proposal; or a mid-way course, to set down a minimum number of ordinates.

Mr. HELLMAN (Sweden) supported the United Kingdom proposal. Moreover, it was important to include a method applicable to existing ships.

The CHAIRMAN invited the Committee to vote on Regulation 7(2) as drafted.

The Committee decided by 27 votes to 3 to retain Regulation 7(2) unchanged.

The CHAIRMAN invited the Committee to consider the texts submitted by the drafting group in document TM/CONF/C.2/WP.27.

Regulation 2(2) - Moulded Depth

Mr. ROCQUEMONT (France) said that he understood that the document was based on a proposal by the United Kingdom delegation and had not yet been agreed by the drafting group. He suggested that it should be referred back to the drafting group before being discussed by the Committee.

The CHAIRMAN said that the Committee would first have to discuss the question of water ballast space raised at the previous meeting.

Mr. WILSON (UK) said that, as a member of the only delegation present at the draft group meeting, he had spent a long time drafting the document. He would be reluctant to attend another meeting to go through the process again.

The CHAIRMAN suggested that the Committee should endeavour to reach a decision on the present paper, in order to be ready for the report of the Working Group which its Chairman was expected to present very shortly.

Mr. ROSELL (Denmark), referring to the words "midship section" in the fifth line of paragraph (a), pointed out that there was no fixed definition of midship. A more precise indication was needed.

The CHAIRMAN recalled that the Committee had decided, at an early stage of its work, that the regulation should apply to ships less than 24 metres in length, which conformed with the provisions of the Load Line Convention. It could be made clear in the regulation that "midship" was half the length in question.

Mr. LEIBENFROST (Yugoslavia) suggested that in the light of Regulation 4(3)(v) (page 9 of TM/CONF/C.2/WP.22), all that was required in the present regulation was moulded draught amidships.

The CHAIRMAN accordingly proposed inserting the word "amidships" after the word "measured" in the first line.

Mr. GUPTA (India) suggested that the length should be defined as in the Load Line Convention and that the drafting group should be instructed to incorporate the relevant wording so that the new Convention would be self-contained.

Mr. ROSELL (Denmark) said that there were two possibilities: to take the draft amidships according to the length in Regulation 4 - as in the Load Line Convention - or as the midship of the tonnage length. There had to be a length for calculating the underdeck tonnage. He supported the Indian representative's suggestion.

Mr. BECKWITH (Liberia) said that he thought the definition of moulded depth could be taken at any position on the ship, in accordance with the Load Line Convention. Hence for the measurement of underdeck tonnage the depth could be at various stations along the length of the ship to the underside.

Mr. RUSSEL (South Africa) agreed with the previous speaker. He also suggested that the word "is" should be replaced by the words "shall be"; otherwise the regulation would be merely an explanation.

The CHAIRMAN pointed out that the indicative tense was customarily used in definitions (of the Load Line Convention). The Liberian representative's point seemed to be that the insertion of the word "amidships" was unnecessary, because where the depth was required for a draught at which to calculate displacement, Regulation 4(3)(v) would apply and there was no need to repeat it. Moreover, if the word "depth" were used elsewhere in the Convention, it would not be depth amidships. Consequently it would be better not to insert the word "amidships".

TM/CONF/C.2/SR.18

After further discussion, he proposed that the wording be left as it stood, on the understanding that the definition of "midship" he had suggested earlier would be inserted in an appropriate regulation.

It was so agreed.

Regulation 2(5) - Passenger Spaces

Mr. ROCQUEMONT (France) said he endorsed the definition in substance. From the drafting standpoint, however, it would be advisable to insert the words "inter alia" before the word "passageways", in the second sentence, since otherwise the list of examples cited might be open to restrictive interpretation.

It was so agreed.

Mr. GUPTA (India) said it was not plain from the wording whether baggage rooms, storerooms, etc., were excluded in addition to crew accommodation situated within passenger spaces.

The CHAIRMAN suggested that the point might be met by an amendment on the following lines: "except that crew accommodation ... and mail rooms are excluded".

It was so agreed.

Mr. GRUNER (Finland) thought it would be more practicable simply to take into account the passenger accommodation part of the ship as a whole, irrespective of whether crew members servicing passengers were accommodated therein; the difference in result would be insignificant.

Mr. WILSON (UK) explained that, in drafting the definition the drafting group had been guided by the definition of passenger spaces given in the SOLAS Convention of 1960, and had also endeavoured to strike a balance between the divergent trends of opinion in the Committee by following a middle course.

There was therefore a case for maintaining the definition as it stood, the more so as the passenger accommodation part of the ship might well take in sizeable crew accommodation that ought to be excluded.

Mr. CABARIBERE (France), reverting to a point he had raised the previous day, proposed that the following phrase be added at the end of the definition: "on ships carrying less than twelve passengers".

Mr. GUPTA (India) said he shared the fears underlying that proposal, for the definition as it stood might open the way to abuses, particularly in the case of the large passenger ships.

Mr. WILSON (UK) thought there was some confusion as to the purpose of the definition. The underlying intention was to restrict within limits the amount of passenger space to be added to tonnage, but the last two speakers were in fact advocating a higher amount than was generally desired. The drafting group had been concerned to differentiate between ships' officers using passenger space for meals and the remainder of the crew using separate messrooms. The last phase of the definition, as it stood, would seem to cover that point.

The amendment proposed by France was rejected.

The text of Regulation 2(5) was approved without change.

Progress report of the Working Group on Gross and Net Tonnage

Mr. ERIKSSON (Sweden), Chairman of the Working Group, introducing part II of the Group's progress report (TM/CONF/C.2/WP.19/Add.1), said that after the preliminary report given at the fifteenth meeting he would keep his comments brief.

The computer exercises done on certain displacement formulae were dealt with in paragraph 9. Due to the lack of data on water ballast spaces, the exercise had been carried out using the water ballast deduction of the IMCO and United Kingdom data corrected to total amount of water ballast using the ratio between total and deducted amount calculated for certain Japanese and British ships. Passenger ships had been excluded. The results obtained in respect of the two formulae, $NT = AV$ and $NT = V(A + B \log_{10} V)$, were to be found in Annex III to the report.

The Working Group had discussed the need for a lower limit of net tonnage to cover the class exemplified by the ore carrier, where the amount of water ballast could be of the order of 60 to 80 per cent and had agreed to recommend that 0.3 GT be adopted as the lower limit.

With regard to passenger ships, the value $1 + \frac{V}{10,000}$ was tentatively suggested for the coefficient in the passenger term. The results of the computer exercise on that class of ship were shown in Annex V, together with a note of the standard deviation found; and annex VI contained additional results for the same ships as separated into two groups by size (above and below 2,000 tons GT).

As to the further work done since the preparation of the report, the Working Group had considered the results of computer exercises on the three formulae:

$$NT = AV_G$$

$$NT = A(V - WB)$$

$$NT = A(0.1 + 0.02 \log_{10} V) (V + WB)$$

and also of exercises where the same ships were divided into types. The total IMCO fleet had been taken into account, with the exception of passenger ships of all types, refrigerated cargo ships and open shelter-deck ships.

Thereafter, it had been decided, in order to provide an objective comparison of the results obtained, to carry out a computer exercise taking displacement and/or volumetric concepts into account.

The results of the two exercises using the formula $NT = A(0.16 + 0.032 \log)(-WB)$ were set out on the left-hand blackboard in three columns, relating to total fleet, ships below 2,000 GT and ships above 2,000 GT respectively, with a note of the standard deviation found. On the right-hand blackboard, the results using the formula $NT = 0.288 V_g$ were given in similar fashion. It had been assumed that the reported cargo space volume was representative for the ships in question. The two tables showed that a smaller standard deviation was obtained under the second formula.

Members of the Working Group would be ready to answer any questions on the findings.

Mr. ROCQUEMONT (France) noted that the data used by the Working Group in its most recent calculations did not include open shelterdeckers, whereas one of the essential decisions of the Conference had been to retain that concept for future vessels; any formula arrived at could thus not be seriously considered until it took account of the open shelterdecker ships.

Mr. ERIKSSON (Sweden), Chairman of the Working Group, said that so far the Working Group had very little information available on the open shelterdecker ships, but the Norwegian delegation was currently working on a formula to cover ships with reduced freeboard, using the gross and net tonnage data for all convertible ships from the IMCO fleet, for the same number from the United Kingdom fleet and for thirty-eight such ships from the Swedish fleet. It would therefore be helpful if other countries provided information about their convertible ships for inclusion in the calculations.

Mr. BØRSUM (Norway), in answer to the French delegation, explained that the original Norwegian proposal included a factor correcting the net tonnage calculation for any full scantling ship, so as to retain the open shelter-deck concept. To make allowance subsequently for open shelterdeckers in that formula would result in an invalid comparison with ships which could not exist because they would have much too small a freeboard.

The CHAIRMAN asked whether the Working Group intended to apply the two formulae it was using to all ships, under both open and closed conditions.

Mr. BØRSUM (Norway) replied that the Working Group would carry out the exercise if the Committee so wished, but pointed out that, irrespective of which net tonnage formulae were finally decided on, the only relevant figures for comparison were the ratios of new draft, freeboard or displacement values, with the ratios of existing net tonnages based on national regulations.

The CHAIRMAN observed that it might be interesting to know which of the two new correction formulae were more sensitive to inclusion of the open shelterdecker case.

Mr. BØRSUM (Norway) noted that the relative reduction in the formulae would be the same for both.

Mr. PROHASKA (Denmark) explained that although it seemed at first sight that the first formula would give a greater ratio for the two types of shelter-deck condition than would the second, that was not necessarily the case since the square of the ratio, for instance, could be used instead.

Mr. ROCQUEMONT (France) thanked the Norwegian delegation for its clarification on the matter of the open shelterdeckers. He noted that it seemed sufficient to apply the formula with the ratio of the two displacements, i.e. the draft ratio or draft ratio squared, and asked what was the correction factor in that case.

Secondly, he noted that there were currently in the fleet a number of ships which were not open shelterdeckers but which yet had a freeboard substantially higher than the geometric freeboard, such as refrigerator ships. Those cargo vessels had not been included in the first stage of the calculations but it seemed essential that they be allowed for in the final formula.

He pointed out, furthermore, that the final choice of type of formula would influence future ship design; it seemed pointless, therefore, to make elaborate comparisons between the two possible formulae based solely on the types and numbers of existing ships.

Mr. DE JONG (Netherlands) suggested that the Working Group should take the convertible ships from the sample of vessels and determine the ratio of net tonnage in the open position to net tonnage in the closed position, then compare that with the ratios of the respective displacements, draughts and freeboards.

Mr. ERIKSSON (Sweden), Chairman of the Working Group, went on to explain that the Group had done an additional comparative exercise using the same formulae as before and dividing the fleet into the same types. The results of that exercise

showed that most types would have lower standard deviations on the second (cargo volume) formula; both types of carrier vessel would, however, have substantial standard deviations because of the great variation in national regulations relating to them.

He further noted that although it had been proposed in the Working Group to discuss the merits of the two correction formulae in arriving at the final net tonnage figure, such a matter should really be left to the Technical Committee as a whole.

Professor PROHASKA (Denmark) explained that both exercises carried out by the Working Group had been based on certain assumptions.

For the first formula, containing the $(V - WB)$ term, the IMCO data used did not include the volume of total water ballast but only the volume of water ballast deductible in accordance with existing regulations. Although those two values might, in fact, differ greatly, a constant ratio had been assumed for each vessel type.

For the second formula, containing the V_G term, the IMCO data included only the volume of cargo spaces below deck; the assumption was therefore a good approximation but not correct in all cases.

He suggested that delegations should check the formulae given for the ships in their own national fleets.

Mr. ERIKSSON (Sweden), Chairman of the Working Group, recalled that in the Group's earlier discussions on the passenger correction term, members' opinion had been divided. Some delegations had held that, since the Technical Committee had been instructed to arrive at new net tonnages which would be as close as possible to existing values, the more accurate correction for passenger space volume should be employed, whereas a majority had preferred the passenger number term only, in the interests of simplicity.

He noted that in TM/CONF/C.2/WP.21 the Danish delegation had proposed a formula containing a coefficient $B = (1 + \sqrt{10,000})$ for use if the passenger number concept were adopted, and after further discussion in the Technical Committee another suggestion had been made in TM/CONF/C.2/WP.30 for $B_1 = (3 + \sqrt{5,000})$. Straight-line graphs had been attached to both those working papers, drawn in such a way that most passenger ships were above the line; it was for the Committee to decide whether the mean line for all ships would be preferable.

Professor PROMASKA (Denmark) noted that the net tonnage results obtained using the formula proposed in TM/CONF/C.2/WP.21, given in TM/CONF/C.2/WP.19/Add.1, differed substantially from existing net tonnage values for passenger ships. It had been assumed that no passenger ship should get a higher net tonnage than before, but in practice there were three exceptions to that rule; i.e. a Soviet ship, the net tonnage of which would be increased by $2\frac{1}{2}\%$, and two United States ships, with increases of between thirteen and thirteen and a half percent. The same procedure would also be followed for the formula contained in TM/CONF/C.2/WP.30.

He pointed out that in the latest exercises, the cargo space formula used for ferries did not include the space occupied by cars or train coaches, because although those spaces were technically cargo spaces their inclusion would give a very large increase in net tonnage.

Mr. SASAMURA (Committee Secretary) reported that in accordance with TM/CONF/C.2/WP.31, paragraph 2, he had contacted the Chairman of the General Committee on the matter of change in

net tonnage. The latter had suggested that the type of provision proposed in Regulation 5 of TM/CONF/C.2/WP.31 would be better contained wholly or partially in an Annex to the final regulations, since it was of a more administrative nature.

The meeting rose at 5.30 p.m.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for ensuring the integrity of the financial data and for facilitating audits.

2. The second part of the document outlines the various methods used to collect and analyze data. It includes a detailed description of the sampling techniques employed and the statistical tests used to evaluate the results.

3. The third part of the document presents the findings of the study. It shows that there is a significant correlation between the variables being studied, and it discusses the implications of these findings for future research and practice.

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8

TM/CONF/C.2/SR.19

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6;
TM/CONF/C.2/WP.26; TM/CONF/C.2/WP.29-30;
TM/CONF/C.2/WP.32) (continued)

The CHAIRMAN outlined the important decisions which the Committee would have to take during the day. To begin with, it would have to choose between two formulae for calculating gross tonnage - one including a constant and the other a logarithmic expression, and the working group would then have to work out the most appropriate figures. The Committee would then consider the question of net tonnage and decide whether to adopt a formula based on displacement less the volume of water-ballast spaces, or a formula introducing cargo spaces, with the necessary passenger corrections in each case. It would also have to decide, with regard to net tonnage, whether the formula should include passenger spaces or number of passengers, confirm the minimum value for net tonnage and finally decide what should be recorded on the tonnage certificate.

Mr. ERIKSSON (Sweden) speaking as Chairman of the working group, said that the United Kingdom had made a computer study of certain formulae for net tonnage, as shown on the graphs in document TM/CONF/C.2/WP.32. The United Kingdom had found that the formula embodying the volume of cargo spaces gave slightly better results with regard to the standard deviation, but both alternatives should be examined.

Mr. PROHASKA (Denmark) said that before the Committee voted between the formula containing a constant coefficient and the formula using a logarithmic expression for calculating gross tonnage, he would point out that there was no need to be apprehensive about applying a logarithmic expression. The

TM/CONF/C.2/SR.19

latter could easily be extracted from logarithmic tables and different coefficients could thus be obtained according to the ship's size, which would be fairer to the owners of small ships (as would be seen from the graphs in TM/CONF/C.2/WP.26).

Mr. ROCQUEMONT (France) said his delegation was not worried about the use of a logarithmic expression, but it wondered whether there was any value in using a formula of that type. He did not in fact think that a large ship would have to pay much more than a small one, as the tariffs were on a sliding scale. His delegation therefore thought it preferable, for the sake of simplicity, to use the formula embodying a constant coefficient.

Mr. de JONG (Netherlands) said it was essential to try to keep as close as possible to the existing figures, and he therefore thought it preferable not to use the formula embodying a constant coefficient.

Mr. ERIKSSON (Sweden) said that while he was not against the adoption of the formula containing a logarithmic expression, he had come to the same conclusion as the representative of France and would prefer to have the formula with a constant coefficient.

Mr. PROHASKA (Denmark) said that the observations made by the representative of France were pertinent. He too thought that it would be simpler to use the constant coefficient.

The CHAIRMAN called for a vote on the proposal to use the formula embodying a logarithmic expression for calculating gross tonnage.

The proposal was approved by 24 votes to 10.

TM/CONF/C.2/SR.19

The CHAIRMAN then invited the Committee to choose between formula (1), giving the net tonnage as a function of displacement, namely, $NT = A (\nabla - WB) + f (P_n \text{ or } P_v)$ and formula (2), giving the net tonnage as a function of the volume of cargo spaces, namely, $NT = A (V_c) \frac{D}{D_{LL}} + f (P_n \text{ or } P_v)$.

Mr. ROCQUEMONT (France) said that the comparison was, of course, not concerned with the second term, relating to passengers, since it was identical in the two formulae. He directed the Committee's attention to the exact meaning of " D_{LL} " which was defined differently in two documents.

The CHAIRMAN, referring to TM/CONF/C.2/WP.29, read out the definition given in it for " D_{LL} ". He asked whether the Committee accepted that definition.

Mr. SOLDA (Italy) thought it would be advisable to add "without any influence on subdivision of ships".

Mr. MOZIGLIA (Argentina) said that, after examining the two formulae proposed for the calculation of net tonnage, his delegation had concluded that the one which used the volume of cargo spaces gave figures close to the existing values, while the other formula gave figures which differed from them. However, it might perhaps be more appropriate for ships of the future. After having weighed up the advantages and disadvantages of the two formulae, his delegation thought formula (1), based on displacement, should be adopted.

Mr. MURRAY SMITH (UK), reverting to the definition of the term " D_{LL} ", said that in the Load Line Convention that definition did not take into account the ship's scantlings, and the situation was further complicated by the fact that there were two different types of ships (A and B). If the definitions which the Chairman

TM/CONF/C.2/SR.19

had read out were used, they would get even further away from reality. What was required on the contrary was a precise definition of that term for the purposes of the Convention under consideration.

Mr. ROCQUEMONT (France) observed that the Argentine delegation had presented the question very well, but every point called for lengthy development. In the definition of " D_{LL} " it was necessary to know what the freeboard in question was. The Italian delegation had suggested that no account should be taken of the scantlings, which would lead to discarding Regulation 1 of the 1966 Load Line Convention and also Chapter II on the requirements for solidity of construction in regard to the assignment of freeboard. The definition of the " D_{LL} " would become much too complicated.

Mr. de JONG (Netherlands) considered that the comparison between the two formulae was not a fair one. The first formula was not correct, because it included a constant A, whereas a variable was needed and it was incorrect to deduct the volume of the water-ballast from the displacement. The Committee had not enough data to proceed at once to a vote.

Like the representative of Argentina, he feared that great difficulties would be encountered in practice if the second formula was used in an attempt to calculate the volume of net tonnage.

The CHAIRMAN pointed out that the coefficient A was not a constant and could be a variable.

Mr. de JONG (Netherlands) remarked that the figures available referred only to British ships and that the information was insufficient.

TM/CONF/C.2/SR.19

Mr. MURPHY (USA) said that the question was one of the most critical which the Conference had to resolve if it wished to draw up a Convention that would be acceptable to all. He recalled that the Conference had at first considered the formula based on displacement to be the most appropriate. Subsequently, it had been led to reverse its decision. His delegation was still of the opinion that the formula using cargo space was preferable for calculating net tonnage, and all the more so since, in respect of the standard deviation - which was 13.9 per cent with the first formula but became 8.5 per cent with the second - results showed definite progress. The figure might be further improved, and that formula might be used with good results.

The CHAIRMAN said he wondered whether, to avoid difficulties, it might not be desirable to add, in the definition of " D_{LL} ", that that term related to B type ships.

Mr. PRIVALOV (USSR) said his delegation had always favoured the choice of volume as a parameter for net tonnage as well as for gross tonnage. On 9 June the Committee had been concerned to find that it was not obtaining satisfactory results from calculating net tonnage on the basis of displacement, and the Conference had given it new and wider terms of reference, which enabled it to carry out a comparative study. The essential thing, therefore, was to determine the parameter, since the coefficient was of minor importance. His delegation shared the views of the United States on that point.

Mr. CHRISTIANSEN (Norway) agreed with the views expressed by the representatives of the United States and the Soviet Union.

Mr. GUPTA (India), too, shared that view. He asked whether in regard to the expression $\frac{D}{D_{LL}}$, the Committee could not depart

TM/CONF/C.2/SR.19

from the provisions of the 1966 Load Line Convention, since existing ships were to preserve their tonnage and, in the case of new ships, new concepts would have to be applied.

Mr. SIMPSON (Liberia) favoured volumetric tonnage, but was worried about the expression $\frac{D}{D_{LL}}$. Many existing ships had the 1930 freeboard, while the Committee seemed to want the adoption of the 1966 freeboard, which would entail new calculations and considerable work.

Mr. SOLDA (Italy) feared that the deduction of water-ballast spaces in the first formula would encourage owners to build ships with enormous water-ballast spaces. He was therefore inclined to prefer the second formula which took into account the volume of cargo spaces. With reference to what had been said by the representative of Liberia, he pointed out that the Committee could fix an upper limit for the expression $\frac{D}{D_{LL}}$.

Mr. PROHASKA (Denmark) thought that, before taking a decision, the Committee should ensure that there was no possibility of misunderstanding. In the first formula, the water-ballast could be considered either as a weight or as a volume and he saw no reason for making a distinction according to whether the water-ballast was above or below the water-line.

One delegation had expressed the fear that owners might be inclined to provide large water-ballast spaces, but he pointed out that by so doing, whatever the formula adopted, the owner would have to reduce cargo space, which was hardly in his interest. Shipyards should be encouraged to construct strong water-ballast tanks in order to improve the safety of ships and to prevent the pollution of the sea by oil.

TM/CONF/C.2/SR.19

As the representative of the United States had recognized, use of the computer had given better results for the second formula than for the first. The figures for standard deviations, quoted by the United States delegation - namely, 13.9 for the first formula and 8.5 for the second formula - could not, however, be compared and were in no sense an argument in favour of the first formula. It was the second formula which would permit of the closest approach to existing tonnage values. The Committee would of course need to have fuller and more precise data concerning the whole world fleet, including shelter-deck ships.

In his view, the Committee should await the outcome of the working group's discussions before choosing a formula. As for the expression $\frac{D}{D_{LL}}$, the figures which were to be supplied by the Norwegian delegation would make it possible to reach a decision with full knowledge of the facts.

The CHAIRMAN proposed that the Committee should decide on its choice of a formula before the end of the meeting.

The proposal was adopted by 27 votes to 1.

Mr. ROCQUEMONT (France) emphasized that the problem for delegations was to present to their Governments the solution which would be easiest to apply from the technical point of view, so as to avoid difficulties in regard to ratification.

On the subject of the expression $\frac{D}{D_{LL}}$, only hypotheses had been put forward. Some delegations thought that the freeboard table for type B ships should be applied, as given in the 1966 Load Line Convention, while others preferred not to take

TM/CONF/C.2/SR.19

it into account. Such differences were serious, for the expression should apply to all ships. If the Committee gave too simple a definition of that expression, the result might be that oil tankers would have a value for $\frac{D}{D_{LL}}$ that was greater than 1. Moreover, shipowners would be likely to try to obtain a low ratio for $\frac{D}{D_{LL}}$; in other words, a high value for D_{LL} . Thus, if only geometrical considerations were taken into account, there was a grave risk that ship yards would build ships whose superstructures were not strong enough.

He pointed out further that both formulae included volumes: water-ballast in the first, and holds in the second; and both contained the term displacement. It was therefore solely for practical and not doctrinal reasons that the French delegation advocated the first formula.

Mr. ENDO (Japan) said that his delegation still stood by the principle that the new net tonnage figures should be as close as possible to the old ones, and it therefore preferred the second of the proposed formulae.

Mr. GUPTA (India) pointed out that, with the first formula, there was a risk that the volume of the water-ballast would be deducted even when the latter was non-existent, as in the case of a fully-loaded ore carrier. The working group should therefore provide for a reasonable limit of deductible water-ballast to avoid any such anomaly.

Mr. RUSSEL (South Africa) stressed the importance of the vote about to be taken, as the success of the Conference would be jeopardized if the Committee did not find a compromise solution.

Mr. MURRAY SMITH (UK), agreeing, said that was why his delegation, though more in favour of the first formula, would vote for the second one, which seemed to have greater support, on the understanding that the working group would make a more detailed study of the factor $\frac{D}{D_{LL}}$, which would doubtless enable it to find a satisfactory solution.

Mr. PROHASKA (Denmark) pointed out to the Indian representative that the problem concerning water-ballast which he had mentioned would apply to the second formula too, but in neither case could the deduction for water-ballast exceed 50 per cent, if a minimum limit for net tonnage were fixed at 30 per cent of the gross tonnage.

Mr. KELLY (USA) explained that the working group had not taken that limit into account in its calculations but had been able to establish to what ships it would apply.

Mr. ROCQUEMONT (France) said that, contrary to that view maintained by several delegations, it was not certain that the second formula would produce results closer to the present figures than the first; in fact no calculation had yet been made with the corrective $\frac{D}{D_{LL}}$; and the working group had frankly admitted that the results of its calculations were questionable, as they had only been based on a small number of ships which did not include certain types of ships at all.

Whichever formula were chosen, it was likely that the standard deviations would, at best, be in the region of 8 per cent, which would in any event entail different treatment for existing ships and new ships.

TM/CONF/C.2/SR.19

Moreover, since both formulae entailed the measurement of volume and displacement, the main thing was to choose the simpler of the two. In cargo ships, the volume of the holds increased with that of the ship, which was itself proportional to the displacement; it could therefore be said that:

$$V_c = K \times D_{LL}$$

In that case, the first part of the second formula would become:

$$NT = A \times K \times D_{LL} \times \frac{D}{D_{LL}}$$

or simplified:

$$NT = A \times K \times D$$

In other words, net tonnage would be the product of the displacement and the coefficient AK. The two formulae were therefore equivalent, but the first was much simpler.

If the second formula were adopted, the French delegation would reserve its position in regard to the factor $\frac{D}{D_{LL}}$ until it had been defined by the working group.

Mr. ERIKSSON (Sweden) supported the view expressed by the representatives of South Africa and the United Kingdom, and thought the Committee should make an immediate choice between the two formulae in order to leave enough time for the calculation of the most appropriate coefficient.

The determination of net tonnage on the basis of volume of cargo seemed to be a reasonable formula which would be acceptable to many countries, and the Swedish delegation would therefore support the compromise solution.

Mr. MURPHY (USA) stressed that the reason why the working group had not yet produced definitive studies was that it had been trying to resolve all the points raised by the various

TM/CONF/C.2/SR.19

delegations. Nevertheless, the formulae before the Committee were adequate to enable it to take a decision, and the United States delegation would vote for the formula based on volume.

The CHAIRMAN called on the Committee to decide between the two formulae.

At the request of Mr. de JONG (Netherlands) a roll-call vote was taken.

The CHAIRMAN asked members to indicate individually the formula for which they were voting.

Poland, having been drawn by lot by the Chairman, was called upon to vote first. The result of the vote was as follows:

In favour of the first formula: Poland, Portugal, Spain, United Arab Republic, Venezuela, Argentina, Belgium, Brazil, France and Kuwait.

In favour of the second formula: South Africa, Sweden, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States of America, Yugoslavia, Australia, Bulgaria, Canada, China, Czechoslovakia, Denmark, Federal Republic of Germany, Finland, Ghana, Greece, India, Ireland, Israel, Italy, Japan, Liberia, Mexico, New Zealand, Nigeria, Norway and Philippines.

Abstentions: Netherlands.

The second formula was adopted by 27 votes to 10 with 1 abstention.

The CHAIRMAN reminded members that, in order to enable the working group to continue its study of the formula which had

TM/CONF/C.2/SR.19

passenger term should be calculated on the basis of the volume of passenger space or of the number of passengers. The question was the subject of a note by Denmark (TM/CONF/C.2/WP.30).

He thought he was right in saying that the formula based on the number of passengers would produce a slightly greater scatter but would have the advantage of being infinitely simpler.

Mr. GUPTA (India), concurring, said that the term $\frac{Nu}{10}$ proposed for the number of unberthed passengers would apply very satisfactorily to pilgrim ships.

The Committee decided by 32 votes to one that the passenger term should be calculated on the basis of number.

The CHAIRMAN said he would also like the Committee to decide whether the coefficient to be applied to the number of passengers should be so calculated that the line representing the passenger term in the graph would run below the majority of the points representing ships; if so, virtually no passenger ship would have its net tonnage increased, with the exception of ferries and United States ships.

Mr. MURPHY (USA) agreed that in that respect his country's rules differed from most other regulations. The adoption of the solution suggested by the Chairman therefore seemed to him reasonable, and he would abstain if the question were put to the vote.

Mr. MURRAY SMITH (UK) pointed out that the graph in TM/CONF/C.2/WP.30 had been prepared on the basis of a limited selection of passenger ships and that the question called for greater reflection because, if the line in question were too low down on the graph, it might encourage port authorities to

increase their dues. He accordingly proposed that the decision be deferred until the next meeting.

Mr. GUPTA (India) supported that proposal.

It was so decided.

The CHAIRMAN asked the Committee whether it considered that a minimum net tonnage should be fixed in order to obviate any abuses made possible by the factor $\frac{D}{D_{LL}}$. If so, he thought that in the light of the information supplied by the working group, the minimum could be fixed at 30 per cent of the gross tonnage.

Mr. CHRISTIANSEN (Norway) said he would prefer 25 per cent.

Mr. de Jong (Netherlands) was afraid that any such limit would penalize shelter-deck ships.

Mr. MURRAY SMITH (UK), supported by Mr. GUPTA (India), expressed the view that if the limit were fixed at less than 30 per cent, the levying authorities might be led to calculate their dues on other, even less favourable bases.

Mr. PROHASKA (Denmark) shared that view, which he supported with figures relating to passenger ships.

The CHAIRMAN proposed that a minimum net tonnage value be fixed, calculated on the basis of gross tonnage.

That proposal was adopted unanimously.

Mr. ERIKSSON (Sweden) thought that the percentage in relation to gross tonnage should be fixed on the basis of the coefficient to be determined by the working group.

TM/CONF/C.2/SR.19

Mr. de JONG (Netherlands) thought the percentage should vary according to the size of the ship, as the lower net tonnage limit ought to be higher for big ships than for small ones.

The CHAIRMAN proposed that the matter be referred to the working group.

It was so decided.

The meeting rose at 12.35 p.m.



IMCO

FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE TWENTIETH MEETING

held at Church House, Westminster, London, S.W.1,
on Thursday, 12 June 1969, at 2.35 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6;
TM/CONF/C.2/2; TM/CONF/WP.19-35)
(continued)

Mr. PROHASKA (Denmark) noted that so far the Working Group had been studying the question of the depth of a vessel in relation to one of the two existing Load Line Conventions (1930 and 1966); he proposed that a simpler solution would be to define the load line as eighty-five per cent of the ship depth to uppermost deck and to construct the formula $(H/0.85 D_u)^n \leq 1$, where $n = 2$ or 3 , to take account of the smaller ships. Another possibility was to drop the 0.85 term and make allowance for it instead in the coefficient A in the formula $NT = A(VC) + f(P_N \text{ or } P_V)$. He suggested that the Technical Committee should instruct the Working Group to consider that possibility.

The CHAIRMAN commented that even with that solution, the matter of defining the uppermost deck together with the problems noted by the French delegation at the previous meeting of the Committee still remained.

Mr. MURRAY SMITH (UK) supported the idea expressed by Mr. PROHASKA (Denmark) but suggested that instead of $0.85 D_u$, the term D_u alone be used; there was then no need for an inequality formula since H/D_u was bound to be less than unity.

Mr. PROHASKA (Denmark) replied that in that case the coefficient A would still have to be adjusted and the uppermost deck still defined.

The CHAIRMAN proposed that the Committee should give a broad mandate to the Working Group to investigate all approaches to the problem of ship's depth and to bear in mind the need to avoid anomalies in the future design of uppermost decks.

It was so agreed.

The CHAIRMAN re-introduced discussion on the position of the line to be drawn for the passenger term in the net tonnage formula (TM/CONF/WP.30).

Mr. PROHASKA (Denmark), supported by Mr. MURRAY SMITH (UK), observed that since the passenger correction term had in any case to be recalculated, the Committee should decide only on the principle for fixing the position of the line and leave the matter of actual figures to the Working Group.

The CHAIRMAN proposed that the Working Group should immediately re-open its investigation of the passenger correction term and the definition of ship's depth.

It was so agreed.

The CHAIRMAN recapitulated that the Committee had yet to decide how to define cargo spaces and how to measure them.

Mr. SOLDA (Italy) pointed out that since the cargo space parameter was to be measured by coefficients, the method of linear measurement itself was not of great importance. He therefore considered that the Committee should maintain the principle of measuring all spaces as far as possible to the moulded lines.

Mr. CUNNINGHAM (USA) said that initially his delegation had used the concept of grain cubic capacity in determining cargo space. After further consideration of TM/CONF/9, however, it had concluded that it was preferable to measure volume to

the moulded lines of the vessel, or to the steel plating of the boundary bulkhead in all cases, thereby avoiding any possible reductions for insulation, for lightweight inner bulkheads, for deep tanks in LNG carriers or for pressure vessels in LPG carriers.

Mr. WILSON (UK), supported by Mr. SIMPSON (Liberia), agreed with the United States delegation but specified that to eliminate any confusion the bulkhead should be measured to the inner structural boundary of the vessel.

Mr. GUPTA (India) asked whether it was proposed to measure all types of cargo spaces, (dry and liquid) in all types of carrier, in the same way.

The CHAIRMAN observed that the agreement was to measure cargo spaces in all cases to their moulded boundaries.

He proposed that the Committee should also agree on the inclusion of a clause in the regulations to the effect that if any vessel were found to be carrying cargo in spaces not designated as cargo spaces, extra tonnage would be added to the tonnage certificate of the ship until such time as it changed hands.

Mr. DE JONG (Netherlands) said he understood that double bottoms would not be included in cargo spaces and asked whether bilges would be included or not.

Mr. WILSON (UK) suggested that the definition adopted by the United Kingdom might be useful, viz: "Cargo spaces are all spaces below the uppermost deck fitted or adapted for the carriage of goods, liquids or gas in bulk which are not ship's stores, bunkers or ballast."

Mr. ROCQUEMONT (France) said that special consideration was needed in the case of refrigeration ships with their special insulation, and methane tankers, which used their cargo as fuel. He believed that although cargo should be determined according to its nature, its position within the vessel was also relevant.

The CHAIRMAN said that the solution might be to stipulate a higher tonnage for ships which were granted the privilege of using their own cargo for fuel. Otherwise the regulation would have to take into consideration all the different possibilities.

Mr. DE JONG (Netherlands) said that the easiest method would be to take cargo spaces to moulded lines, including fuel tanks but excluding pump rooms and refrigerator spaces.

Mr. UGLAND (Norway) said that if cargo were defined as all goods carried on the ship and discharged from it - which would exclude such items as stores - cargo spaces could be defined as the spaces used for cargo.

The CHAIRMAN pointed out that that definition would not cover water ballast.

Mr. ROCQUEMONT (France) said that, for the purposes of the Working Group, the Committee would have to decide whether or not to include fuel bunkers in the general volume of cargo spaces. Two delegations had proposed including fuel oil tanks which, being large, would affect the formula to be prepared.

The CHAIRMAN said that the Working Group had been using volume without fuel in the coefficient.

Mr. CUNNINGHAM (USA) said that the main difficulty with fuel was the outboard wing tanks aft and forward of the engine room, which might be defined as spaces in

the vicinity of cargo spaces. The IMCO data on volumes to be added for tankers referred to volumes in the tanker cargo space area, namely, the block of tonnage forward of the engine room bulkhead. It could be indicated that bunkers outside the engine room would be included in the tonnage.

Mr. WILSON (UK) said that it would be illogical to include oil fuel or any other bunkers in the ship's cargo space. The Committee was discussing the cargo, which was the ship's payload, put on board because the owner expected profit from delivering it to its destination. If there were any fear that bunkers might be used for cargo it could be stated that oil fuel bunkers on vessels such as tankers should not be connected in any way with the ship's cargo lines.

Mr. DE JONG (Netherlands) observed that pipe connections were easy to install and easy to remove. Bunkers were normally of small capacity: the point was to prevent excessive bunker space being taken into account.

Mr. CHRISTIANSEN (Norway) said that cargo and cargo space were real, not theoretical. Inclusion of bunkers or fuel tanks would only give rise to further questions and make matters more complicated.

Mr. FILIPPOVICH (USSR) said that fuel bunkers required for a ship should not be considered as cargo space and should not be included in the net tonnage.

Mr. DE JONG (Netherlands) said that the real problem was for the measurer. It was known that oil carriers used water ballast spaces for oil, but who was to know whether store rooms, fuel bunkers or water ballast spaces were being used for cargo?

The CHAIRMAN said that he had had that point in mind in suggesting a penalty clause. He invited the Committee to vote on the concept that fuel should not be included in cargo.

There were 30 votes in favour and 2 against.

The CHAIRMAN invited the Committee to vote on the inclusion of a sentence to the effect that if an owner were discovered to be using the fuel tank for cargo, the net tonnage would be increased by the volume of the fuel tank so used, until the ship transferred to another flag. The wording would be left to the Drafting Group.

Mr. WILSON (UK) proposed that the penalty should apply in the case of all spaces not intended for cargo, and not be limited to fuel tanks.

It was decided by 32 votes to 2 to instruct the Drafting Group to prepare a text on the lines indicated by the Chairman, as amended by the UK representative.

The CHAIRMAN, in reply to a question by Mr. DE JONG (Netherlands), said that the problem of checking the spaces should be left to the proposed working group on the tonnage certificate.

The CHAIRMAN, in the absence of volunteers, suggested that the question of cargo spaces should be referred to the drafting group, composed of representatives of France, UK, USA and USSR, which should be instructed to prepare:

- (1) a definition of cargo space as the space to the moulded line of the structural boundaries of cargo spaces;
- (2) a draft of the penalty for abuse of cargo space;
- (3) a text for the exclusion of fuel from cargo.

s It was so agreed.

The CHAIRMAN invited the Committee to consider its instructions at the proposed working group on the tonnage certificate. The problem of the draught remained to be settled. Whatever coefficients were used, the tonnage would be related to the ship's actual draught since only by checking the tonnage certificate could it be ascertained whether the ship was sailing at its correct or at a higher draught. Hence the draught should correspond to displacement at the denominator in the tonnage certificate.

Mr. DE JONG (Netherlands), suggested that it would be sufficient to record the number of the national load line certificate on the tonnage certificate.

Mr. GUPTA (India), referring to the problem of water ballast space, pointed out that in a ship with a large number of wing tanks, all of which were certified as water ballast spaces, the measuring authority would measure only the spaces specified by the owner as cargo spaces.

The CHAIRMAN said that the penalty clause agreed upon would cover that situation, since water ballast space used for cargo would have to appear on the tonnage certificate.

Mr. GUPTA (India) said that he was still not satisfied that the problems such as the carriage of fresh water for cattle and the use of oil for a variety of purposes had been satisfactorily resolved.

Mr. ROCQUEMONT (France), referring to the Netherlands representative's comment, said that it would not be sufficient to indicate merely the number of the freeboard certificate on the tonnage certificate. The gross tonnage, net tonnage and all other figures relevant to the formula should also appear on the tonnage certificate.

The CHAIRMAN pointed out that for passenger ships there should also be a reference to the SOLAS certificate.

Mr. OVERGAAUW (Netherlands) said that since the second formula had been chosen, it would be necessary to specify on the tonnage certificate all the spaces capable of containing liquid or dry cargo; otherwise there would be ample opportunity for manipulation.

The CHAIRMAN said that the Working Group could include that point in the penalty clause.

Mr. CHRISTIANSEN (Norway) stressed the need for simplicity.

Mr. WILSON (UK) drew attention to a four-page model tonnage certificate which his delegation had prepared in the light of comments made during the discussions. The first page contained the gross or net tonnage and space for information such as passenger numbers and draught if necessary. The second and third pages had been left blank for the insertion of a sketch of the ship, so that the ship could be measured to ascertain if the outline had been altered. The fourth page listed the main spaces in the gross tonnage, with description, length and tonnage. A column could be added to that page showing the spaces included in the net tonnage with reference to numbers reflected in the sketch. A tonnage certificate on those lines would make it very easy to check in cases where misuse of cargo space was suspected.

Mr. KING (Kuwait) agreed that the spaces not included in the cargo space should be listed on the tonnage certificate.

The carriage of fresh water, referred to by the Indian representative, was essential when a ship carried cattle, but the spaces so used would otherwise become ballast spaces. He wondered what such spaces should be called.

Mr. GUPTA (India) said that in general he agreed with the Netherlands on the need to list all potential cargo spaces on the tonnage certificate. Since, however, manipulation was widespread even where such spaces were listed, he urged that special mention should be made of water spaces.

Mr. HABACHI (Observer, Suez Canal Authority), speaking at the invitation of the Chairman, stressed the need for as much detail as possible on the tonnage certificate.

Mr. ROCQUEMONT (France) enquired what would be the position of new ships, whose certificate would show both the old and the new tonnage during the transition period.

The SECRETARY replied that, in accordance with Article 3, as agreed by the General Committee (page 3 of TM/CONF/C.1/WP.11) the regulations in Annex I would apply to new ships. Hence new ships would be measured in accordance with the new Convention as soon as it came into force.

The CHAIRMAN invited volunteers for membership of the Working Group on the tonnage certificate.

The representatives of France, the Netherlands, Norway, UK, USA and USSR having volunteered, he suggested that the Working Group should be established with that membership.

It was so agreed.

The meeting rose at 4.10 p.m.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE TWENTY-FIRST MEETING

held at Church House, Westminster, London, S.W.1.,
on Friday, 13 June 1969, at 9.45 a.m.

Chairman:	Mr. F. SPINELLI (Italy)
Secretary:	Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1., not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/C.2/WP.37)
(continued)

The CHAIRMAN proposed that the Committee should examine the second draft of the regulations for determining gross and net tonnages of ships (TM/CONF/C.2/WP.37).

Regulation 1

Mr. GANTIOQUI (Philippines) proposed that the end of paragraph 1 should be amended to read: "consist of gross and net tonnages".

The CHAIRMAN stated that he would draw the attention of the Drafting Committee to that point.

Regulation 2

Mr. ROCQUEMONT (France) felt that, before considering the first two definitions (upper deck and moulded depth), it would be advisable to wait until the Working Group had made a more thorough study of the factor $\frac{D}{D_{LL}}$ contained in the formula approved the previous day (see TM/CONF/^{LL}C.2/SR.19). For the time being, indeed, those definitions applied only to ships without a free-board mark but they might have to be amended as a result of the Working Group's findings.

Mr. LEIBENFROST (Yugoslavia) considered that the last sentence of sub-paragraph (a) of paragraph 2(a) was not clear and gave rise to unnecessary complications. He therefore suggested either deleting that sentence or amending the text by substituting "... the prolongation of the side ..." for the words "the side of the keel".

Mr. SASAMURA (Committee Secretary) pointed out that the definition of moulded depth was reproduced word for word from the definition given in the Convention on Load Lines; it would therefore be difficult to change it.

Mr. WILSON (UK) shared that view, although he felt that the definition in question was not very clear.

Mr. PEREIRA (Brazil) wished the expression "midship section" to be replaced by "athwartship section".

Mr. GUPTA (India) said that he, too, could suggest amendments but that he supported the opinion expressed by the Committee Secretary and the United Kingdom representative.

The CHAIRMAN proposed that the Committee should approve paragraph (2)(a) in the form in which it was drafted in the document.

It was so decided.

Mr. GUPTA (India), referring to paragraph 3(a), proposed that, in order to obviate the possibility of a space being exempted from measurement as a result of the owner simply removing the hatchway covers, the end of sub-paragraph (a) should be replaced by "if such space is capable of being closed".

Mr. ROCQUEMONT (France) said that he shared the Indian representative's concern but felt that the text of sub-paragraph (a), in the form in which it was drafted, was satisfactory in that respect. If it gave rise to doubts, however, it should be made clearer.

Mr. WILSON (UK) thought it was difficult to draft a text excluding all possibility of abuse. It was for the Administration to be vigilant and, for instance, to inspect whether hatchways were provided with cleats for fixing covers that were not there. At all events, to prevent (the case mentioned by the representative of India) from occurring in the 'tween-deck, which was quite a possibility, the words "on or above the upper deck" which had figured in an earlier text and had been deleted, should be reintroduced in paragraph (3)(b).

Mr. SOLDA (Italy) suggested that the end of paragraph (3)(a) should be replaced by the words "if the openings are liable to be closed".

Mr. DE JONG (Netherlands) said he thought that the last part of paragraph (3)(a), from the words "if means are provided...", might give rise to difficulties and should therefore be deleted. What should be avoided in any case was that an opening should make it possible for the whole of a space to be exempted instead of part of it. The deletion he proposed presented no drawback, for paragraph (2)(b) specified all the spaces to which the exemption applied and the clause in question was a repetition of what was said under (b)(i).

Mr. WILSON (UK) was opposed to the deletion of that phrase which, in the view of the Working Group, served to establish a very important principle.

The CHAIRMAN wondered whether there was not a contradiction between sub-paragraph (a) and sub-paragraph (b), for, in the case of an opening in the 'tween-deck, under the former sub-paragraph, the whole deck would be exempted from measurement and, under the latter, only the space below the opening would be exempted.

Mr. ROCQUEMONT (France) said he shared the concern of the Netherlands representative but feared that the deletion of the end of sub-paragraph (a) might make the definition too restrictive: a roofless sun-deck situated in the superstructures (which was often to be found in liners) would then be included in the measurement.

Mr. ROSELL (Denmark) supported the suggestion made by the Netherlands representative as, if the phrase were retained, the cargo spaces of ships with no hatchway covers would be exempted.

The CHAIRMAN thought that, if the Committee accepted the Netherlands Proposal, it should ensure that the expression "not provided with means of closing", which occurred in the fifth and sixth lines of sub-paragraph (b)(i)(1), applied to the whole of that sub-paragraph.

Mr. KHABUR (USSR) thought that any possible abuse could be avoided if the end of sub-paragraph (a) were replaced by the words "if the construction permits of the closing of such an opening".

Mr. ROCQUEMONT (France) supported the proposals by the USSR and Italy which complemented one another perfectly.

The CHAIRMAN stressed the two-fold nature of the problem; there were two things to be avoided: first, that the end of sub-paragraph (a) should make it possible for an entire deck to be exempted from measurement and, secondly, that sub-paragraph (b) should permit of the unwarranted exemption of a space situated opposite an opening.

Mr. WILSON (UK) stated that the authors of the draft before the Committee had taken as their basis the rules applied by the authorities of the Panama Canal. Those rules had never given rise to any difficulties and did not encourage the building of "undesirable" ships. Starting out from the concept that any space^{the openings of which were provided with means of closing} was to be considered as an enclosed space, they had sought to define enclosed spaces and not open spaces.

Mr. DE JONG (Netherlands) remarked that the last two lines of sub-paragraph (a) were liable to lead to misunderstandings, whereas their deletion could do no harm.

The CHAIRMAN thought the deletion feasible, provided that the necessary clause was added to sub-paragraph (b).

Mr. GUPTA (India) was in favour of the wording proposed by the delegate of the USSR which practically met the wishes of the representatives of Italy and France) and also seemed likely to satisfy the Netherlands representative.

Mr. DE JONG (Netherlands) commented that the lengthy discussion which had taken place was sufficient evidence of the fact that the phrase in question might give rise to difficulties. It would be better to set out those concepts clearly in sub-paragraph (b), as the Chairman had suggested.

The CHAIRMAN noted that it seemed to be unanimously agreed that only the 'tween-deck spaces situated below openings should be exempted. A proviso should therefore be inserted in sub-paragraph (b) after the words "as enclosed spaces" as follows: "unless means are provided for closing the openings" or "if the ship's construction does not permit of their being closed."

Mr. WILSON (UK) suggested the wording: "if no means are provided for closing the openings."

The CHAIRMAN proposed that it should be left to the Drafting Committee to prepare a final text incorporating in sub-paragraph (b) the idea "that the openings not provided with means of closing) and that (the ship's construction does not permit of their being closed" and that the last two lines of sub-paragraph (a) (from the words "enclosed space" onwards) should be deleted.

It was so decided.

Mr. DE JONG (Netherlands) said that on constructional grounds he would have liked to see the provisions of sub-paragraph (b)(i)(1), governing the height of the opening, replaced by a provision restricting it to 100 per cent of the width of the opening. But he agreed with the Chairman, who said that that formula might give either excessive or inadequate results and might well give rise to involved argument, and he would withdraw his proposal.

With regard to sub-paragraph (b)(i)(3), he wondered what would happen in the case of an open well separating two spaces, only one of which was excluded.

Mr. CABARIBERE (France) remarked that the difficulty arose in part from the use of the expression "open well" to designate a space cutting the deck from side to side between two superstructures, whereas one would have assumed that there could only be a "well" if the two superstructures were joined by complete bulwarks. He would prefer to see the sub-paragraph drafted as follows:

"Where a completely open interval separates any two spaces ..."

Mr. WILSON (UK) thought that the last objection raised by Mr. de Jong might be met by inserting the words "either or both of which" in the second line. The observation made by the representative of France, on the other hand, appeared to concern only the French text, since British shipping men found the expression "open well" perfectly comprehensible.

The CHAIRMAN asked whether the concept of the "open well" applied to the case where two superstructures were joined by bulwarks of the same height as the superstructures. Would not that interpretation contradict the provisions of sub-paragraph (b)(iv)?

Mr. HABACHI (Observer, Suez Canal Authority) said that under the Suez Canal rules the exemption required a break in the covering and the walls, in other words, a complete separation of the two superstructures.

Mr. LEIBENFROST (Yugoslavia) considered that the concept of the "open well" applied whether the two superstructures were joined by bulwarks or by open guard-rails.

Mr. WILSON (UK) suggested overcoming the difficulties by adding sketches to the final texts. The height of the bulwarks seemed to him to be immaterial for the application of the provisions. Sub-paragraphs (i)(3) and (iv) were not contradictory, because they dealt with different problems.

Illustrating his remarks with a sketch, he showed that the exemption granted, for example, to a certain part of a poop or gangway adjoining an open well would depend entirely on the relation between the breadth of the open well (the distance between the two superstructures) and half the breadth of the deck; but the existence of bulwarks played no part in deciding whether an exemption were possible.

Mr. DE JONG (Netherlands) proposed that in order to avoid difficulties, the words "considered as enclosed spaces and shall not therefore be" should be deleted from lines 2 and 3 of sub-paragraph (b).

It was so decided.

Mr. CABARIBERE (France) pointed out another drafting difficulty. In (b)(v) the word "redan" was used for the English word "recess". Since an inside space was concerned, it would have been better to use the word "niche".

Mr. GRUNER (Finland) said he did not fully understand the meaning of the first sentence of (b)(ii).

The CHAIRMAN said he would submit the various observations on paragraph (3) to the Drafting Committee and would ask the Secretariat to take particular account of the French representative's comments when drawing up the French text.

Paragraph 4 (TM/CONF/C.2/WP.37)

Mr. YU-SHANG-LI (China) wondered whether it might not be necessary to include a definition of "berthed passengers" and "unberthed passengers" in the paragraph, because that distinction was made in Regulation 4 on page 7 of the same document.

The CHAIRMAN agreed that the definition was not included in paragraph 4 of Regulation 2, but said that was precisely because it had been considered that the details given in Regulation 4, on page 7, would suffice.

Mr. WASILEWSKI (Poland) proposed that, in the interests of simplicity, where a ship carried not more than 12 passengers in accommodation other than cabins, that accommodation should not be included in the tonnage calculations.

Mr. GUPTA (India) felt that the reference on page 7 was not enough and that some definition of "unberthed passengers" must be provided. The Simla Regulations which were currently being revised, at present designated those passengers by the expression "special trade passenger."

He thought that the maximum number of such passengers carried in accommodation other than cabins should be fixed at 8. If such other accommodation contained fewer than 8 persons, then those persons should be considered as cabin passengers.

Mr. KHABUR (USSR) said he thought the difficulty arose from the fact that the term employed was incorrect. Instead of "unberthed passengers" - a concept which was now out of date - the term "passengers without cabins" should be employed, and that expression could then be defined as applying to "a passenger provided with a separate berth in accommodation capable of holding a maximum of 8 persons."

Mr. KING (Kuwait) considered that the term "passengers" should apply to any fare-paying person.

Mr. MURRAY SMITH (UK) thought that under the terms of paragraph 3 that interpretation would in fact be correct, but he too felt that the concept of "unberthed passengers" was outdated. It would in fact be preferable to distinguish three sorts of passengers on page 7 of the document, namely:

N = number of passengers in cabins
N₁ = number of passengers in dormitories
N₂ = number of genuinely unberthed passengers
(e.g. aboard cross-Channel ships)

Mr. GUPTA (India) said he was broadly in agreement with the United Kingdom proposal, which would cover all the possibilities, but thought it might perhaps be preferable to replace $\frac{N}{10}$ by $\frac{N}{6}$ in the formula on page 6 of document TM/CONF/C.2/WP.37.

Mr. DE JONG (Netherlands) wondered whether, in that case it might not perhaps be necessary, (in the case of unberthed passengers,) to keep the total number shown on the safety certificate.

The CHAIRMAN thought there would be no objection to adding a phrase on the lines of: "as indicated by the ship's safety certificate."

Mr. GUPTA (India) said he would prefer the following wording: "the number of passengers, as certified by the Administration and shown on the ship's safety certificate."

The CHAIRMAN proposed that the Committee adopt the term $N + \frac{N_1}{6} + \frac{N_2}{10}$ in the formula for net tonnage.

It was so decided.

Mr. KHABUR (USSR) proposed that the Committee notify the Working Group immediately of that decision, which might alter its calculations.

Paragraph 5

Mr. ROCQUEMONT (France) proposed that consideration of the paragraph should be restricted for the time being to the first four lines. Changes in the use to which certain spaces were put ^{not} might involve a change of tonnage, possibly accompanied by a change of draught.

Mr. CUNNINGHAM (USA) reminded the Committee that the text had given rise to a lengthy debate. On the one hand, the definition took no account of the provisions consumed aboard the ship. On the other hand, it had been thought that those spaces should be identified by permanent markings, making it possible to carry out certain checks, and to apply certain penalties where there were changes of use which had not been reported.

The CHAIRMAN thought that consideration of that wording should be deferred until the Committee came to study Regulation 8, which dealt with the matter.

Request for instructions by the Chairman of the Working Group on Tonnage Certificates.

Mr. SEAGO (UK) stated that the Working Group needed certain instructions to be able to carry out its work. In the first place, the Group was of the opinion that, for the purposes of the Convention, an entirely new form of tonnage certificate should be prepared for existing ships, showing both gross tonnage and net tonnage. Secondly, the Technical Committee should inform the Working Group whether, during a transitional period, the tonnage certificate should show the tonnage figures resulting from the old and from the new systems. The Working Group was asking for instructions on those two points.

Mr. ROSELL (Denmark) wondered whether those questions, which might have certain legal aspects, should not be put to the General Committee.

The CHAIRMAN pointed out that the Working Group in question was in fact a Working Group of the Technical Committee.

Mr. ROCQUEMONT (France) recalled that the French delegation had made specific proposals in that connexion. They would be found in TM/CONF/3, at pages 17 to 20. His delegation did

indeed take the view that, for a certain transitional period - for example, ten years - , tonnage certificates should contain both sets of figures. However, it left it to the operators of the system to consider the date of application of the new tonnages.

Mr. CHRISTIANSEN (Norway) said he partly shared the French representative's opinion but was afraid that the inclusion of dual tonnages might give rise to some difficulties.

Mr. DE JONG (Netherlands) approved of the intention of the French delegation. However, since the idea was to keep the new tonnage figures as close as possible to the old ones, would it not be feasible for ships to retain the same tonnage figures on the certificate during that period?

Mr. HABACHI (Observer, Suez Canal Authority) proposed that the tonnage calculations should be appended as an annex to the tonnage certificate itself.

The CHAIRMAN said he feared the Committee was departing from its terms of reference.

The meeting rose at 12.35 p.m.



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INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969
Technical Committee

PROVISIONAL SUMMARY RECORD OF THE TWENTY-SECOND MEETING

held at Church House, Westminster, London, S.W.1,
on Friday, 13 June 1969, at 2.40 p.m.

Chairman: Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates(continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6;
TM/CONF/C.2/WP.37 and WP.38; TM/CONF/C.1/WP.11
and Add.1) (continued)

International Tonnage Certificate (continued)

Mr. OLSEN (Norway) said that, although it had some sympathy with France's views, his delegation was wholly opposed to the idea of embodying two sets of figures in the tonnage certificate. Existing ships should continue to operate until expiry date. under the national tonnage certificates in force, and the owner should have the option of requesting re-measurement according to the new regulations.

The CHAIRMAN agreed that existing ships, including those of the open/closed shelter-deck type, should continue to use the national certificates, with maintenance of the privileges enjoyed under bilateral agreements. The point at issue was whether the Working Group on the Tonnage Certificate should concern itself solely with new ships or should make provision in the certificate also for existing ships that might be re-measured according to the new regulations.

Mr. FOTIADIS (Greece) said that the main obstacle to unification in tonnage measurement had been the difficulty of evolving a system that would give figures closely approximate to present tonnages. That obstacle had now been removed and the justification seemed to be slight for embodying two sets of figures in the tonnage certificate, representing the tonnages as calculated under the existing and under the new rules. Double work would be involved for the administration and, where the services of the classification societies had to be called upon, possibly double charges on the owner. He was therefore against the

idea of introducing such a complication and was likewise opposed to the suggestions that sketches and details of all calculations involved should be attached to the certificate. Since such requirements were not considered necessary in the more important matter of freeboard, he failed to see why they should be insisted on for tonnage measurement.

Mr. FILIPPOVICH (USSR) said his delegation considered that the certificate to be drafted should be intended only for new ships and that, for existing ships, the certificates in force should continue to be used. It was inconceivable that, throughout the transitional period, measurement according to both the new and the old regulations should be required for new ships, particularly since the new system was designed to give closely approximate figures. Double work of the kind was unjustifiable.

Mr. ROCQUEMONT (France) said that all were agreed that existing ships should continue to navigate under the tonnage certificate already in force.

On the second point at issue, he could appreciate the arguments adduced but was still apprehensive of the effect on relations between port authorities and ship-owners of showing for new ships only the tonnages as calculated under the new regulations; for if that were done, the port authorities would be obliged to apply the new tonnages immediately and, in the absence of adequate proof of the equity of the new system, might well be tempted to increase charges. His delegation's proposal was designed to preclude any such development by providing comparative figures for a specified period of time, thus allowing the port authorities a free decision on the date of application of the new tonnages.

Mr. SOLDA (Italy) said that his delegation subscribed to the views expressed by Norway concerning the certificate for existing ships.

As to the French proposal, he would point out that once a country had decided to ratify the Convention, it should be prepared to adhere to the new regulations laid down and not ask for perpetuation of the rules now in force.

Mr. MILCH (Israel) also endorsed the Norwegian stand.

The Committee might be interested to hear the views of the port authorities of his country regarding the matter raised by France. Their opinion was that the tonnage certificates issued to new ships should embody only the figures assigned under new regulations, for otherwise the way might be opened to abuses or misconstruction. Moreover, it was not the business of tonnage measurement authorities to provide ports with statistics; the port authorities could obtain such data for themselves.

The CHAIRMAN noted the general agreement that existing ships should continue to operate under the national tonnage certificates. With a view to advancing the work, he suggested that the Working Group on the Tonnage Certificate be instructed to proceed on the assumption that the certificate would embody one set of figures only; and that the question raised by France should be referred to the General Committee, as one possibly outside the Technical Committee's terms of reference.

Mr. MURPHY (USA) endorsed that procedure. His delegation would support the idea that the certificate for new ships should include only the tonnages deriving from the Convention. The point raised by France, being of broad import, should be referred to the General Committee; he could already foresee difficulties in reconciling the provisions of Regulation 3 with those of Article 13.

Mr. SASAMURA (Committee Secretary) informed the Committee that the General Committee had already dealt with the matter of the certificate for existing ships; hence, there was no need for a decision on that point.

Mr. VANCRAEYNEST (Belgium) said his delegation considered that new ships should certainly be issued with an international certificate according to the Convention regulations. The General Committee had decided that the regulations should apply to existing ships after the expiry of a time limit. In the interim, they would obviously have to operate under the existing certificate. To facilitate the changeover, it was thought that Governments might be invited to have measurements made under both the old and the new systems, for the information of the port authorities.

It was decided that the Working Group on Tonnage Measurement should be instructed to prepare a certificate embodying one set of figures only.

Mr. ROCQUEMONT (France) said his delegation wished to be recorded as opposing the decision just taken. On the question of competence, he considered the matter at issue to be essentially a technical one, the implications of which could be properly understood only by the members of the Technical Committee. It was noteworthy that the standard deviation found in all the exercises undertaken was of the order of 6 per cent, a magnitude obviously justifying his delegation's position.

Mr. KHABUR (USSR) pointed out the technical calculations involved in determining tonnages according to both the old and the new systems would represent a considerable amount of work. In any case, owners would probably prefer to retain the certificates in force, as a known factor in face of the unknown.

Mr. SOLDA (Italy) considered that the matter was outside the competence of the Technical Committee. Nevertheless, it had to be considered and one way out might be for the Conference to recommend that tonnages should be determined in accordance with the new regulations prior to the date of entry into force of the Convention, in order to have comparative data available.

Mr. GRUNER (Finland) pointed out that ship design would be based on the new system once the Convention came into force; and accordingly there would be no basis for obtaining comparative measurements.

The CHAIRMAN put to the vote the question whether the certificate for new ships should embody one set of tonnage figures only, calculated according to the regulations laid down in the Convention, or two sets calculated according to the old and the new rules.

There were 30 votes in favour of one set of figures only.

There were 3 votes in favour of two sets.

The CHAIRMAN said he assumed the Committee was agreeable to the question raised by France being referred to the General Committee.

It was so agreed.

Mr. HABACHI (Observer for the Suez Canal Authority) said that, in any event, ships passing through the Suez and Panama Canals would still have to carry two documents on board, as at present. Secondly, every State was legally empowered to check the documents presented, and his reason for asking for the inclusion of the detailed calculations was that his Authority wished to check the tonnages inscribed in the certificate.

Second draft of regulations for determining gross and net tonnages of ships (TM/CONF/C.2/WP.37) (continued)

Regulation 3: Gross Tonnage

The CHAIRMAN noted that it had been agreed that the ship's funnel was an enclosed space, to be included in the total volume; the case of masts, cranes, etc. could be left to individual port authorities to decide.

The wording of Regulation 3 was approved without change.

Regulation 4: Net Tonnage

Paragraph 1

The CHAIRMAN pointed out that a number of corrections would have to be made to the formula, including introduction of an N_2 term and re-definition of several of the symbols, when the Working Group had completed its task.

He recapitulated that it had been agreed that $(N + N_1 + N_2)$ equalled the total number of passengers as indicated in the ship's international certificate.

Mr. OLSEN (Denmark) suggested that, since some passenger ships operated solely in home waters and thus had only a national certificate, it would be preferable to refer to "the number of passengers as indicated in the ship's certificate".

It was so agreed.

Discussion on paragraph (1) was adjourned until the Working Group had issued a further report.

Paragraph (2)

The wording of paragraph (2) was approved without comment.

Paragraph (3)

Discussion on paragraph (3) was adjourned until the Working Group had issued a further report.

Paragraph (4)

Discussion on paragraph (4) was adjourned until the Working Group had issued a further report.

Discussion on Regulation 4 was adjourned.

Regulation 5: Change of Net Tonnage

Paragraph (1)

Mr. ROCQUEMONT (France) noted that the text had been studied by the Working Group at a time when it was thought to make net tonnage a simple function of displacement to the summer load line; since then, however, it had been agreed that net tonnage would be a function of two factors, displacement and cargo space volume. He drew attention therefore to the fact that account should be taken also of changes in cargo space volume, for instance for ships changing from one type of cargo to another.

Mr. CUNNINGHAM (USA) pointed out that in the case of an ore carrier which changed to carrying grain, the draught would remain about the same and the net tonnage would increase. For such ships operating in the Panama Canal, for instance, it was therefore necessary to permit a reduction in net tonnage if and when they subsequently reverted to the ore trade within a reasonable time, to enable them to continue to operate economically.

Mr. DE JONG (Netherlands) observed that the factors of change in cargo space volume and change in passenger number should also be introduced into paragraph (3).

Mr. ROCQUEMONT (France) agreed. In reply to the US delegation, he pointed out that it had been agreed that for all types of convertible ship, changes in load line, draught, etc. resulting in decreases in net tonnage should not be permitted within less than one year intervals.

He suggested the following wording as a guideline to a redraft of paragraph (3): "When for any reason the features of a ship used for the calculation of tonnage are modified, a new certificate shall be issued; the tonnage value shown on the certificate shall not, however, be reduced until twelve months have elapsed from the issue of the preceding certificate."

Mr. MURRAY SMITH (UK) said that while his delegation appreciated the special problem of ships effecting regular conversions from one cargo to another, it nevertheless agreed with the French delegation that it would be too complex a task to create a special category of ship to be exempt from the one-year rule, which had in any case been agreed upon in Plenary Session.

Mr. SIMPSON (Liberia), Mr. CHRISTIANSEN (Norway), Mr. ERIKSSON (Sweden) and Mr. FOTIADIS (Greece), supported the view put forward by the United States delegation.

Mr. BONN (Canada), Mr. OLSEN (Denmark) and Mr. BORG (Sweden) supported the view put forward by the delegations of France and the United Kingdom.

Mr. MURPHY (USA) said that although his delegation was not truly in favour of the one year interval applied to all types of vessel, it was nevertheless, willing to accept a text for paragraph (3) along the lines proposed by the French delegation.

Mr. ROCQUEMONT (France) thanked the United States delegation for its cooperation and pointed out that in his draft wording for paragraph (3) he had used the word "tonnage", without specifying gross or net; he felt that further discussion on that point was called for.

The CHAIRMAN proposed that the concept of change in passenger number be appropriately introduced into Regulation 5.

It was so agreed.

Regulation 6: Calculation of volumes and displacement

Regulation 6 was approved without comment.

Regulation 7: Measurement and Calculation

Regulation 7 was approved without comment.

Regulation 8: Penalties

The CHAIRMAN drew attention to the fact that Regulation 8 had to be considered in relation to Regulation 5(3)(ii); if that latter were to be eliminated, as the General Committee might decide, then the phrase "or a real change in the ownership of the ship" would have to be deleted from Regulation 8(1).

Mr. MURPHY (USA) noted that the case of shipowners carrying cargo in spaces not designated as cargo spaces paragraph (2) was in general penalized heavily by the various national regulations governing implementation of international Conventions, rather than by the Conventions themselves.

Mr. BORG (Sweden) agreed with the United States delegation; it was in any case a matter for the General Committee to decide.

Mr. NOZIGLIA (Argentina), while agreeing that the question should be referred to the General Committee, said that it would be necessary to specify the means by which penalties under Regulation 8 would be imposed in cases of infringement in countries other than the country of issue of the tonnage certificate.

Mr. DE JONG (Netherlands) wondered who would certify that there had been an infringement and who would alter the tonnage certificate. It should be borne in mind that an infringement could be discovered in a country that was not a party to the Convention. In view of the time required to change a ship's capacity, he suggested that the duration of the penalty should be extended to, say three or five years. It should not, however, be imposed for the lifetime of the ship.

The CHAIRMAN drew attention to the provisions of Article 12(3). He agreed that it might be necessary to refer the matter to the General Committee; but before doing so the Committee should decide if there were still any technical problems.

Mr. WILSON (UK) said it was obvious that a penalty would have to be imposed for infringement of the regulations. The problem was the duration of the penalty. Too short a period would be no deterrent.

Mr. GUPTA (India) while agreeing entirely with the Chairman and the UK representative, said that the USA representative had made a valid point. He suggested that Regulation 8 should be modified so as to exclude the word "penalty" but to specify that ships infringing the regulation should not qualify for the relevant deductions for tonnage.

Mr. MURPHY (USA) said that he, too, considered that the problem should be dealt with by the General Committee. Part of the problem was covered by Article 1, whereby Contracting Governments undertook to implement the provisions of the Convention. Action on infringement was an enforcement problem and hence the responsibility of Governments.

Mr. SOLDA (Italy) asked if he was correct in thinking that carriage in a closed space of goods that could be carried in an open space would be an infringement; but that the temporary closing of an open space - for example against bad weather - would not be an infringement provided nothing were carried in the space.

Mr. ROCQUEMONT (France) said that the Italian representative's question concerned the nature of an infringement. The other problem was the penalty. International conventions did not normally stipulate penalties; they were a problem of enforcement for the Government of the flag country.

In the present case, as in the Convention on the Prevention of Oil Pollution, it was necessary to define the nature of an infringement by stating what was authorized and what was prohibited. He suggested that Regulation 8(2) should state that cargo should not be carried in closed spaces not included in the net tonnage calculation; and that Regulation 8(1) should state that in the event of any alteration in the structure of the ship, whereby space hitherto excluded from the gross tonnage was put to a condition which did not permit such exclusion, such space should be included in the gross tonnage.

The question of penalties should be left to the General Committee.

Mr. CONTOGEOGIS (Greece) said that he entirely agreed with the US representative.

The CHAIRMAN said that, with the addition of the word "use", the agreed new version of Article 10(1)(TM/CONF/C.1/WP.11/Add.1) would cover both the nature of an infringement and the penalty. He suggested that the General Committee should be requested to incorporate the addition.

Mr. KING (Kuwait) said that if Article 12, on control, could be made to cover the problem of cargo spaces, there would be no need to specify penalties, since under paragraph (3) non-compliance with the tonnage certificate would be notified to the Government of the Flag State.

Mr. CHRISTIANSEN (Norway) said that the Italian representative's questions might give rise to problems. For example, would a hatchway covered by a tarpaulin constitute a closed space?

The CHAIRMAN asked if the Committee considered that Article 10(1) amended as he had suggested would be comprehensive enough to render Regulation 8 unnecessary.

Mr. WILSON (UK) thought that the amended Article would not be adequate because it did not state what would happen to a ship whose Tonnage Certificate was no longer valid.

Mr. MUENCH (Israel) said that the Chairman's proposed text was adequate and went as far as was permissible in an international convention. There was still, however, the problem of the duration of the penalty.

Mr. CHRISTIANSEN (Norway) pointed out that a ship deprived of a valid Tonnage Certificate in a country other than its country of origin would be unable to proceed.

Mr. BECKWITH (Liberia) agreed with the representative of Kuwait that the problem was one of control. A possible solution would be a requirement for the marking of open spaces, similar to the requirement for marking cargo spaces in Regulation 2(5)

Mr. PEREIRA (Brazil) suggested that the difficulty referred to by the UK representative might be solved if it were provided that the penalty should be decided by the administration concerned.

Mr. WILSON (UK) said that penalties imposed at the port where infringements were discovered would be meaningless. Since port penalties would probably be reflected in harbour dues, which might be small, the profit on the extra cargo would make the risk of discovery worthwhile for the owner.

Mr. NOZIGLIA (Argentina) agreed with the UK representative. He suggested that the authorities in the country where the infringement occurred should notify the authorities in the country of issue of the ship's certificate so that they could take the necessary action.

Mr. WILSON (UK) suggested a penalty clause which could be applied by administrations but which did not define the penalty.

The CHAIRMAN suggested that Regulation 8 should be deleted and that the Committee should recommend the General Committee to include a reference to the use of space in Article 10(1); and to add a sentence to the effect that the certificate should be cancelled or an adequate penalty should be imposed by the administration of the State whose flag the ship was flying.

Mr. GUPTA (India) said that the solution was not entirely acceptable. If the matter were left to the General Committee, it might be suggested that action could be taken by the country of infringement, by the State whose flag the ship was flying, or by both countries.

As to the cancellation of the certificate, in his experience nothing would stop a ship from sailing to another port even if it had no certificate.

The CHAIRMAN asked if the Committee agreed that the provision should appear in an article and that Regulation 8 should be deleted.

It was so agreed.

The CHAIRMAN asked whether the Committee agreed that the list in Article 10(1) (TM/CONF/C.1/WP.11/Add.1) should include the words: "use of space".

It was so agreed.

The CHAIRMAN asked if the Committee wished to draw the General Committee's attention to the fact that some members were not satisfied with Article 10(1) and considered that it should include a reference to possible penalties, without specifying them, to be imposed by the country in which an infringement was discovered, or by the country whose flag the ship was flying, or by both countries.

It was so agreed.

Mr. KENNEDY (Canada) expressed concern at the deletion of Regulation 8 without reference to the General Committee. The Regulation was closely related to Regulation 2, especially paragraph (3), concerning closed spaces. The Committee was dealing with the spaces which owners were privileged to have deducted under the measurement scheme. It was not dealing with penalties. He hoped that the General Committee would be permitted to use Regulation 8 in its work.

The CHAIRMAN proposed that the General Committee's attention should be drawn to the Committee's views on the possibility of abuse of privileges in the regulations, and that the General Committee should be requested to consider measures to prevent such abuse. Regulation 8 could be used as technical background information.

It was so agreed.

Mr. ROCQUEMONT (France) supported the proposal. He suggested that consideration should be given to the number of passengers as well as to the use of space, since it might be important, particularly in its bearing on such matters as the number of lifeboats needed.

It was so agreed.

Mr. WILSON (UK) introducing document TM/CONF/C.2/WP.39, pointed out that the changes incorporated in the new text had all been made in response to observations put forward during the morning session in regard to Regulation 2(3), except for the last paragraph (Measurement of Cargo Spaces, page 3,) which covered a new point.

Mr. KING (Kuwait) drew attention to a typing error. In the third line of (i)(3) the word "inclusion" should be replaced by "exclusion".

Mr. ROCQUEMONT (France) questioned the appropriateness of the word "these" in the sixth line of (b) on page 1, since it concerned openings which had not previously been referred to in that paragraph.

Mr. WILSON (UK), replying to Mr. SIMPSON (Liberia) and Mr. ROCQUEMONT (France), pointed out another typing error. In the third line on page 3 "inspection" should be replaced by "irrespective".

He thought that his delegation would be able to supply figures corresponding to those regulations fairly quickly.

Mr. SIMPSON (Liberia) said that the second sentence of the last paragraph appeared to contradict the principle of moulded measurement which had been adopted.

The CHAIRMAN, quoting the case of tankers, pointed out that the wording used in the second sentence might have unfair effects. He proposed that the words "or the open floors, as the case may be" be deleted.

Mr. WILSON (UK) explained that the Drafting Group had in fact been anxious to adopt a precise wording in order to avoid interpretations which might have unfair effects, but he had been won over by the Chairman's argument and he would accept the proposed deletion.

Mr. KENNEDY (Canada) pointed out that the details given in the second sentence of the paragraph on measurement might have an influence on ship construction.

The CHAIRMAN, agreeing, said that it would have a bad influence, because it would militate against the use of double bottoms just where they were most necessary.

Mr. GUPTA (India) thought it unnecessary to go into all the details of measurement. It would be enough to say that moulded measurement should be employed.

The CHAIRMAN thought the Committee could not avoid the problem, which would have to be solved sooner or later. He also pointed out that, following the deletion to which Mr. Wilson had agreed, the difference between the new text and that of Regulation 6 was reduced to the question of cargo hold bilges. Was there really any justification for the provision referring to them?

Mr. WILSON (UK) thought that the main thing was to try to simplify the calculations: the use of coefficients could help there.

Mr. CUNNINGHAM (USA) supported that suggestion. Since the principle of moulded measurement had been accepted, it was pointless and perhaps misguided to enter into too great detail.

The CHAIRMAN observed that if the formula of one or several coefficients were adopted, some factors would be taken into account and not others, and he would like to know if that was in fact the intention of the authors of the proposal.

Mr. CUNNINGHAM (USA) replied that the idea was indeed to choose a coefficient applicable to different types of ship, in view of the fact that different concepts such as "solid ceiling" and "insulation" were basically fairly similar.

The CHAIRMAN concluded that, in that case, Regulation 6 was sufficient as it stood, subject to the possible insertion of a phrase which might be worded as follows "whatever the fitting of insulation or the like".

Mr. KING (Kuwait) referred to a comment made earlier by the Canadian delegate, emphasizing its aptness.

The CHAIRMAN reiterated his suggestion of keeping the wording of Regulation 6, subject to the insertion of a generally worded formula.

Mr. SIMPSON (Liberia) supported the Chairman's suggestion and pointed out that if the superstructures were measured, measurements should also be taken to the outside of boundary bulkheads.

Mr. CUNNINGHAM (USA) was not sure that the term "boundary bulkheads" was clear. For example, how was it to be interpreted in the case of a metallic double bottom?

The CHAIRMAN suggested the choice of an equivalent term such as "boundary plating".

Mr. ROCQUEMONT (France) asked whether the term "boundary bulkheads" applied in container ships to the thin plating enclosures and whether the definition would have the effect of excluding the portion between the grooves and the thin plating.

The CHAIRMAN read out Regulation 6 with the proposed addition.

Mr. WILSON (UK) pointed out an ambiguity in the use of the expression "any other material".

The CHAIRMAN wondered whether it would not be necessary to mention the deck and emphasized the question of wooden decks.

Mr. WILSON (UK) suggested the term: "the inner side of the structural surfaces."

The CHAIRMAN stressed the importance of the thickness of the wood in wooden ships.

Mr. LEIBENFROST (Yugoslavia) supported the Chairman's comments concerning wooden ships.

The CHAIRMAN read out a revised version of Regulation 6 based on the various comments put forward. Paragraph (1) read as follows:

"(1) All volumes and displacement included in the calculation of gross and net tonnages, irrespective of the fitting of insulation or the like, shall be measured to the inner side of the shell or structural bulkheads in ships constructed of metal, and the outer surface of the shell or structural bulkheads in ships constructed of any other material."

The CHAIRMAN read out a draft recommendation on the definitions of terms, worded as follows: "The Conference, recognizing that the definitions of certain terms used in the International Convention on Tonnage Measurement of Ships, 1969, such as 'length' and 'passenger', are identical to those contained in other conventions of which the Organization is depositary, recommends that Contracting Governments should take steps to ensure that identical definitions of terms used in such conventions should be interpreted in a uniform and consistent manner." (TM/CONF/C.2/WP.24)

The Committee gave its approval to that recommendation.

The meeting rose at 6.25 p.m.



IMCO

FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE TWENTY-THIRD MEETING

held at Church House, Westminster, London, S.W.1.
on Monday, 16 June 1969, at 9.45 a.m.

Chairman : Mr. F. SPINELLI (Italy)
Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/6;
TM/CONF/C.2/WP.19/Add.3; TM/CONF/C.2/WP.37;
TM/CONF/C.2/WP.43) (continued)

The CHAIRMAN invited the Committee to consider document TM/CONF/C.2/WP.19/Add.3, which contained Part IV of the progress report of the Working Group on Gross and Net Tonnage.

Mr. ERIKSSON (Sweden), Chairman of the Working Group on Gross and Net Tonnage, presented the report and outlined its contents. The Working Group had pursued the terms of reference set out on page 1, paragraph 18.

As indicated in paragraph 19, the Working Group recommended a coefficient of $0.2 + 0.02 \log_{10} V$ for the gross tonnage formula. The recommendations concerning the net tonnage formula were contained in paragraph 20, the coefficient recommended being $0.2 + 0.02 \log_{10} V_c$, which was the same as for gross tonnage with the addition of cargo space.

The CHAIRMAN paid a special tribute to the Chairman and members of the Working Group and everyone who had helped them. Their untiring work might well have saved the Conference.

In the absence of general comments, he invited the Committee to consider the report item by item. It should be noted that the formulae to be discussed all had coefficients based on the metric system.

Gross tonnage formula (paragraph 19)

The Committee approved the formula $0.2 + 0.02 \log_{10} V$ recommended by the Working Group.

Mr. GRUNER (Finland) said that an indication should be given of the number of figures to be used in the logarithm.

Mr. ERIKSSON (Sweden), Chairman of the Working Group, said that the Working Group had agreed that a table should be appended to the regulations to demonstrate that fewer figures would be needed for smaller ships.

Mr. PROHASKA (Denmark) pointed out that the volume "V" in the formula had been determined on the basis of calculations by Simpson's rules or similar rules which gave only one-tenth per cent of accuracy. That meant that there was no point in taking them beyond four decimal figures, even for large ships. A logarithmic table with four figures would be suitable.

The CHAIRMAN suggested that one of the delegations possessing a computer might be willing to prepare two tables, prior to signature of the Convention, one in metric and the other United Kingdom units.

Mr. ERIKSSON (Sweden) Chairman of the Working Group, said that since the Group had agreed to use the metric system, only a metric table would be needed: cubic feet measurements could be converted beforehand.

The SECRETARY pointed out that whichever system were agreed on would have to be applied throughout the Convention and the Regulations.

Mr. GUPTA (India) proposed that both figures should be given, the United Kingdom units in brackets.

Mr. PROHASKA (Denmark) pointed out that it would not be possible with cubic feet to obtain the simple coefficient used in the proposed formula. His delegation was strongly in favour of a single system which would be clear and would prevent future errors. There would be no difficulty in conversion where necessary.

Mr. CUNNINGHAM (USA), while agreeing that conversion would be easy, suggested that the United Kingdom equivalent should be included in brackets in the Regulations.

The CHAIRMAN asked if the Committee agreed that only the metric system should be used in the formula, but that the metric figures with the United Kingdom equivalent in brackets should appear in the text. The Drafting Committee would verify that such presentation was in conformity with IMCO rules.

It was so agreed.

Net Tonnage Formula (paragraph 20)

The CHAIRMAN, referring to sub-paragraph (a), suggested that the Load Line definition of "weathertight", which had been the subject of considerable debate, should be incorporated in the definition of "upper deck" and added to the terms mentioned in the proposed recommendation on the uniform interpretation of terms (TM/CONF/C.2/WP.43). Its purpose was to prevent the use of high decks solely to reduce tonnage.

It was so agreed.

The CHAIRMAN invited comments on the coefficient in sub-paragraph (b) and the factor in sub-paragraph(c).

The recommendation in sub-paragraphs(b) and (c) were approved.

The CHAIRMAN said that the formula thus approved was as follows: $NT = (0.2 + 0.02 \log_{10} V_c) V_c \left(\frac{4d}{3D}\right)^3$.

Mr. ROCQUEMONT (France) said that the Committee had overlooked a serious consideration, on which the success or failure of the Conference might depend. He had understood that the coefficient was to be used to take into account open shelter-deck or other ships with a low draught. A single formula for all ships, as now agreed upon, would certainly be used by owners to reduce net tonnage. He demonstrated, by means of diagrams, that it would be possible, through the addition of a light shelter-deck, to transform a tanker with gross tonnage of

200,000 and net tonnage of 60,000 into a shelter-deck tanker with 130,000 gross tonnage and 43,800 net tonnage. The slight increase in gross tonnage would make little difference to costs since port dues were based on net tonnage. The figures were approximate, but it would be easy to calculate the 'tween-deck required to obtain the minimum ratio of 0.3 between net tonnage and gross tonnage. New ships would be built with that proportion, and even existing ships could be modified, since the new Convention would apply to them if it were so requested.

Mr. PROHASKA (Denmark) pointed out that the French representative had left out of account an important factor, namely that of first cost for the postulated upper 'tween-decks. The additional deck would necessarily have to be of full scantling strength and that cost would be so heavy as to rule out the possibility of such manipulation. Furthermore, since many ports levied dues either on the basis of draught or of gross tonnage, he failed to see how it could be profitable to increase gross tonnage in the way suggested.

The new regulations would certainly influence ship design and no doubt some way would be found to increase depth for the purpose of obtaining reduced net tonnage, particularly in the case of medium-sized and small ships; but there would be no particular harm in such a development, and the corrective factor had in fact been introduced specially to cater for that type of ship. The ideal, would, of course, have been to base tonnage on displacement.

Mr. CUNNINGHAM (USA), agreeing with the views just expressed, opined that the cost of adding the useless 'tween-deck would be high for any type of vessel, not simply the tanker. His understanding was that the factor $\frac{4d}{3D}$ had been selected for the express purpose of stabilising the effect of the formula on tankers, the idea being that they would be unable to obtain a reduced net tonnage without considerable structural expenditure.

Mr. ROCQUEMONT (France) agreed that the operation envisaged would add to the first cost of the ship, but only slightly, for the superstructure would not have to satisfy the regulations under the International Load Line Convention beyond the requirements on water and weather tightness and, hence, could be kept light. And the saving on dues would more than offset the additional structural cost.

As to the safety question, he would reiterate that the purpose of the Conference was not to improve the international convention directly concerned.

The CHAIRMAN pointed out that no classification society would accept a superstructure of less strength than the main deck.

To take the factor $\frac{4d}{3D}$ to the cube power would, he thought, tend to encourage reduction of draught in the special case of container ships where ballast was needed for safety in the loaded condition. Possibly, it would be better to take the factor to the square power.

Mr. CHRISTIANSEN (Norway), said he would go so far as to say that the figures cited by France were more or less fictitious rather than just approximate. Any tanker of the size cited was obviously in need of more cubic capacity. To meet that need, any added 'tween-deck would have to be a substantial structure, costing around \$1 million; and the result would be an apparent increase in gross tonnage to around 130,000 tons whereas the net tonnage would come back to 60,000 tons.

Mr. ERIKSSON (Sweden) considered that the point raised by France should be discussed in conjunction with the definition of cargo spaces, with a view to determining whether a between deck of the postulated kind should be included in total cargo volume.

The Working Group, after discussion, had reached a consensus on a cubed power for the corrective factor, as giving figures the closest to existing net tonnages for open shelter-deck ships.

Mr. DE JONG (Netherlands) recalled that his delegation had endorsed the original decision that the gross tonnage formula should take no account of the open shelter-deck concept, for at that time Proposal C was still valid insofar as net tonnage was concerned. Now that it was considered necessary to introduce a corrective factor into the net tonnage formula in order to take account of that concept, his delegation considered that the same should be done in the gross tonnage formula. Possibly, other delegations would also have second thoughts on the matter and accordingly the issue should be referred to the Conference for reconsideration.

In the light of Annex XI to the report, it would seem more equitable to have a corrective factor to the squared rather than to the cubed power.

Mr. ROCQUEMONT (France), answering points raised, said he was convinced that the result of his exercise, if based on specific data, would be exactly the same. Secondly, classification societies determined scantling strength as a function of the draught, in which there would be no change; the strength of the upper 'tween deck would be of account only insofar as tonnage was concerned and therefore it could be as light as would be consistent with the requirements of the International Load Line Convention.

If the formula for net tonnage now under consideration was maintained, France would, albeit with regret, be unable to sign the Convention.

Mr. HABACHI (Observer for the Suez Canal Authority) said his Authority had had the experience of a vessel passing through the Suez Canal in which three decks had been converted into one.

The CHAIRMAN reminded the French representative that, under classification society rules, notification of any structural alterations made in a ship was obligatory; and the classification societies would certainly want to be assured that the stress on the upper deck was not greater than that on the lower deck considered as satisfactory under their rules.

Mr. PROHASKA (Denmark), referring to Annex XI, explained that some of the points in the lower half of the diagram related to ships built under the existing regulations with very deep hulls and hence extremely low net tonnage. If those vessels were omitted, the scatter would be found to be even around the cubed line and that was why the Working Group had opted for the cubed power of the corrective factor, in line with its instructions to seek a formula giving figures as closely approximate as possible to existing tonnages.

Mr. ROCQUEMONT (France) observed that the choice of a cube power was not surprising, given that a longitudinal and not a displacement ratio was involved. The Working Group had undoubtedly done good work on the basis of the instructions given but his objection to the formula still remained, for undoubtedly the case he had postulated was a valid one. A light superstructure of the kind envisaged could even be constructed with expansion joints.

Mr. BELL (UK) thought the point raised by France was a fundamental one in that it again brought into question the whole implications of the shelter-deck concept. Originally, the United Kingdom had taken the view that it would be difficult to make an exception for one class of ship and that, if displacement or draught ratios were introduced in a formula controlling net tonnage, the comparison would have to be between actual draught and maximum permitted draught under the Load Line Convention, as otherwise the formula would encourage design manipulations. The corrective factor, as it stood, had been found to give satisfactory results for shelter-deck ships in the United Kingdom fleet; nevertheless, it would open the way to manipulating draughts that would normally be higher. He would accordingly suggest that the ratio be raised from .75 of draught to moulded depth to .85 to the square power.

Mr. PROHASKA (Denmark) said there was considerable opposition to such a rise, because its effect would be to give ships with more than 15 per cent freeboard an unjustified reduction in net tonnage.

He pointed out that an upper deck with expansion joints would have no influence on tonnage for it would not meet the requirement of continuous jointing.

Mr. DOLCINI (Italy) said that, in line with the Netherlands, his delegation was in favour of the corrective factor being to the square rather than to the cube power.

Mr. CHRISTIANSEN (Norway) said his delegation was willing to accept the Netherlands proposal on that point if it met with general support.

Mr. TYMOUR (United Arab Republic) said his delegation would endorse the French stand on the corrective factor since it would apparently affect net tonnage.

Mr. ROCQUEMONT (France) agreed that the effect would be less by using the factor to the square power; but his criticism went far beyond that point, as his earlier remarks showed.

Mr. PROHASKA (Denmark), illustrating his comments on the blackboard, explained that the Working Group had taken into consideration the possible adverse influence of the new regulations on ship safety and future ship design and had recognized the need for ensuring that no encouragement be given toward a reversion to ships of the old deck cargo type. And it had decided to introduce the corrective factor purely in order to rule out any such development.

Mr. ROCQUEMONT (France) fully agreed that the only way to preclude an adverse influence on ship design would be to relate net tonnage to displacement. Secondly, the Danish representative had once again demonstrated that the gross tonnage rules, as approved, would have the disadvantage of encouraging deck cargo transport. In the circumstances, it might be advisable to reopen consideration of the gross tonnage formula with a view to using displacement as the basic parameter, particularly as the disputed corrective factor in the net tonnage formula was an absolutely new proposal, coming at a very late stage in the negotiations.

The CHAIRMAN proposed to put to the vote the Netherlands suggestion that the corrective factor should be to the square power.

In answer to a point raised by the French representative, he noted that there was only one firm proposal before the Committee, that of the Netherlands, since the discussion on the gross tonnage formula could not be reopened.

Mr. FILIPPOVICH (USSR) thought it would be difficult to take the vote at that juncture in the absence of any proposal to meet the point raised by France. He would therefore suggest tentatively that an additional regulation might be inserted, reading: "Any added space, the purpose of which cannot be explained by the operational needs of the ship and the installation of which would artificially reduce the net tonnage, shall be added to the net tonnage".

Mr. KING (Kuwait) pointed out that, under that wording, a tanker owner would be able to claim exemption by installing the pipe-line system on the added superstructure instead of, as normally, below deck.

Mr. ROCQUEMONT (France) welcomed the Soviet suggestion as plainly showing that delegation's awareness of the gravity of the problem under consideration. However, the likelihood of manipulation would not be ruled out by any such regulation, however much the text might be elaborated. The owner could claim, for instance, that the space in question was a recreation room for the crew.

Mr. DE JONG (Netherlands), illustrating his comments on the blackboard, showed successive changes in ship design over the years and made the point that it was obviously better to construct so as to have the longitudinal strength on the upper deck. A more useful purpose for an artificial between deck on a tanker would be to accommodate ballast tanks. In any case, his delegation did not share France's apprehensions that there would be recourse to manipulations of the kind envisaged.

The CHAIRMAN asked the Committee to indicate if it preferred the factor $(\frac{4d}{3D})^3$, as proposed by the Working Group.

There were seven votes in favour of using $(\frac{4d}{3D})^3$.

It was decided to adopt the factor $(\frac{4d}{3D})^2$ in the first term of the NT formula to take account of ships assigned a freeboard in excess of the minimum freeboard.

Passenger term

Mr. GUPTA (India) stated that his delegation had no objections to passengers being divided into two groups only, provided that those groups were: passengers in cabins with not more than eight berths, and passengers in dormitories with more than eight berths or entirely unberthed. He thus proposed deletion of the N_2 term tentatively included in the formula.

Mr. MURRAY SMITH (UK) explained that his delegation had done an exercise using the passenger term with N_1 , N_2 and N_3 on two British ships having a few cabin berths and a much greater number of dormitory berths, and had found that if the N_2 term were ignored the new net tonnage values obtained were closer to existing figures than if the N_2 term were included. In the light of that discovery, and since the Indian delegation had concluded that a two-factor passenger term adequately took account of the pilgrim ships, his delegation was in favour of deleting the N_2 term and redefining the remaining two N values; thus: N_1 = cabin passengers, N_2 = non-cabin passengers.

Mr. ROCQUEMONT (France) reminded the Committee that it had not yet voted on the essential issue of whether or not the new net tonnage figures should be as close as possible to the net tonnage values of existing ships, a matter which had some bearing on the inclusion of individual terms in the formula.

Mr. PROHASKA (Denmark) recalled that although the Working Group had done its calculations using two passenger groups only, i.e. $(N_1 + N_2)$ and N_3 , as originally defined in paragraph 20(d),

simply because it did not have separate data available for the N_2 group, it nevertheless considered that in any case the N_2 term would not substantially influence the passenger term in the NT formula.

The CHAIRMAN invited the Committee to vote on the proposal made by India and supported by the United Kingdom to delete the N_2 term.

There were twenty-two votes in favour and none against.

It was decided to delete the $\frac{N_2}{6}$ factor in the passenger term of the net tonnage formula, and to redefine N_1 as the total number of cabin passengers and N_3 as the total number of non-cabin passengers. The N_3 factor was then re-named N_2 .

Lower limit for the net tonnage

Mr. PROHASKA (Denmark) drew attention to the procedure adopted by the Working Group in testing values for the lower limit of the net tonnage formula in TM/CONF/C.2/WP.44, and to the graphs thereto appended (Diagrams I and II). He invited delegations to check the figures used for the calculations and listed in TM/CONF/C.2/WP.44 for their own countries' ships.

He added that the passenger coefficient itself had been derived on the basis of the principle that passenger ships should not be allocated net tonnages on the new system higher than their current values.

The CHAIRMAN invited the Committee to vote on whether a lower limit should be fixed for the net tonnage of 0.3 GT, for cargo ships.

There were twenty-six votes in favour and one against.

It was decided to fix a lower limit for the net tonnage of cargo ships of 30 per cent of the gross tonnage.

Mr. PROHASKA (Denmark) pointed out that the Working Group had intended that the lower limit, whatever it might be, should apply to all types of ships. He explained that subsequently the Group had decided on different limits for the two terms in the formula, as indicated in the second sentence of paragraph (1), Annex XIII.

It had found, firstly, that the 0.25 limit for the first term in the net tonnage formula for passenger ships would give a better balance between the two terms and, secondly, that for all IMCO passenger ships the limit had to be applied for the first term because it was so small. For the mixed cargo and passenger ships and the car and rail ferries, the Working Group had concluded that a limit of 0.25 for the first term and an overall limit of 0.30 would give the best approximation to the NT Values for existing passenger ships, but allocating them in most cases rather a lower figure than before.

Mr. ERIKSSON (Sweden), Chairman of the Working Group, noted that in the graph with a limit of 0.3 GT (Diagram II, TM/CONF/C.2/WP.44), the ferries were included but not with their correct final net tonnage whereas in the other graph, with a limit of 0.25 GT (Diagram I, TM/CONF/C.2/WP.44), all ferries were excluded because car space was not included in the tonnage and the points would have been negative. It was clear that the ferries would have higher net tonnages under the proposed new formula.

The CHAIRMAN invited the Committee to vote on the Working Group's recommendation that the first term in the NT formula should not be taken less than 0.25 GT, and that the net tonnage as a whole should not be taken less than 0.30 GT, for all ships.

There were twenty-seven votes in favour and none against.

It was decided to fix a lower limit for the net tonnage of all ships of 30 per cent of the gross tonnage and to fix a lower limit for the first term of the net tonnage formula of twenty-five per cent of the gross tonnage.

Mr. ROCQUEMONT (France) pointed out that a considerable number of delegations had refrained from voting in the choice between a power x of 2 or 3 for the factor $(4d/3D)^x$ in the first term of the net tonnage formula. He therefore considered there should be further and broader discussion on a suitable value for x .

The CHAIRMAN asked the Working Group to explain why the phrase "in register tons" had been put in square brackets in each case, in Annex XIII.

Mr. ERIKSSON (Sweden), Chairman of the Working Group, explained that the Group had, after brief discussion, concluded that the units for the final NT formula might not, strictly speaking, be register tons after all, because not all components of the formula were in register tons. Furthermore, it was extremely difficult to define a register ton. It had therefore drawn attention to the issue for further consideration.

Mr. GUPTA (India) agreed that the Committee should clearly define the term "register ton". He also asked for confirmation that both terms in the NT formula would be applied to all ships, whether passenger or cargo vessels.

Mr. GRUNER (Finland) said he hoped that the second term in the formula would not be applied to cargo ships carrying less than twelve passengers; in view of the small difference it would make numerically, to their net tonnages, he felt that it was just a needless complication.

The CHAIRMAN suggested that some stipulation could be made after the definition of passenger number in Annex XIII to the effect that for the purposes of the NT formula the total number of passengers indicated in the ship's certificate was to be taken as zero if it was, in fact, less than thirteen. He considered that the addition of even a small amount of net tonnage in the case of certain small vessels, such as research ships, might be an unnecessary disadvantage for them.

Mr. GUPTA (India) formally proposed that for the purposes of applying the net tonnage formula, a vessel carrying less than thirteen passengers should be deemed to have none.

The CHAIRMAN invited the Committee to vote on the Indian proposal.

There were twenty-nine votes in favour and none against.

It was decided to insert a sentence in Annex XIII after The definition of passenger numbers indicating that, in the application of the net tonnage formula, the total number of passengers as indicated in the ship's certificate was to be taken as zero for ships carrying less than thirteen passengers.

Mr. GRUNER (Finland) asked whether the certificate referred to in the definition of passenger numbers in Annex XIII was the ship's tonnage certificate, the safety certificate or any other certificate. He pointed out that the safety certificate generally stipulated the number of persons on board, not the number of passengers.

The CHAIRMAN observed that the unqualified expression "certificate" had been used expressly, since any certificate indicating the total number of passengers was adequate.

He suggested that the expression "ship's certificate" used on page 2 of Annex XIII should be left as it stood.

It was so agreed.

The meeting rose at 12.45 p.m.



TM/CONF/C.2/SR.24
16 June 1969

Original: FRENCH

IMCO

FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE TWENTY-FOURTH MEETING

held at Church House, Westminster, London, S.W.1,
on Monday, 16 June 1969, at 2.30 p.m.

Chairman: Mr. L. SPINELLI (Italy)

Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

CONTENTS

	<u>Page</u>
<u>Agenda item 4</u> - Consideration and preparation of proposed technical regulations on tonnage measurement and tonnage certificates (continued)	3

AGENDA ITEM 4 - CONSIDERATION AND PREPARATION OF PROPOSED
TECHNICAL REGULATIONS ON TONNAGE MEASUREMENT
AND TONNAGE CERTIFICATES (TM/CONF/C.2/WP.19/Add.3,
TM/CONF/C.2/WP.41; TM/CONF/C.2/WP.42/Add.1;
TM/CONF/C.2/WP.45) (continued)

Mr. PROHASKA (Denmark), referring to Draft Regulation 3 (TM/CONF/C.2/WP.42/Add.1) pointed out that the Committee had decided to express the volume in cubic metres. In regard to Regulation 4, he preferred the original text to the new draft.

The CHAIRMAN said that the Committee should decide whether the expression "in register tons", appearing in square brackets in Regulations 3 and 4, should be retained.

Mr. ROCQUEMONT (France) said that there was no difficulty about the French version but that in the English text the word "tons" might lead to confusion.

Mr. WILSON (UK) considered it essential to define what was meant by "tons".

Mr. NOZIGLIA (Argentina) suggested that the expression "tonnage units" should be used.

Mr. MURPHY (USA), supported by Mr. PROHASKA (Denmark), proposed that the words in square brackets be deleted.

The United States proposal was adopted.

The CHAIRMAN invited the Committee to consider the report of the ad hoc working group on the international tonnage certificate (TM/CONF/C.2/WP.45).

Mr. SEAGO (UK), speaking as Chairman of the working group, said that it had taken as its models for the front of the tonnage certificate the 1960 certificate (Convention for the Safety of Life at Sea) and the 1966 certificate (Convention on Load Lines). After the name of the country it had added "for which the Convention came into force19..", because the ratification dates would not be the same for all signatories.

For the dates of keel-laying and of modifications undergone by the ship, it referred to the relevant articles of the Convention. Three dimensions had been included: overall length, moulded breadth, and moulded depth to the upper deck; the tonnages were expressed in tons, but since the Committee had deleted that term in Regulations 3 and 4, it would doubtless not wish to include it in the tonnage certificate.

The working group had decided to put on the reverse of the certificate all the information needed to identify the spaces included in the tonnage, but had considered that an enumeration of those spaces together with a conversion factor might give rise to errors, and the port authorities might wish to base their charges on the highest figure. To indicate the existence of an open space, an asterisk was to be added to the spaces included in the tonnage, but the working group had not wished to include details which would have required a third page. In regard to passengers, the number of those in dormitories was to be omitted in accordance with the decision taken by the Committee.

The CHAIRMAN said that the Articles referred to on the front of the certificate were 3(2) and 3(2)(b).

Mr. HABACHI (Observer, Suez Canal Authority) suggested that the certificate should show the name and address both of the shipyard and of the owner.

Mr. OVERGAAUW (Netherlands) thought that the first version of the certificate had been better drafted than the new one. He felt that the units of volume should be expressed in cubic metres and that all spaces capable of containing cargo should be indicated; it would also be advisable to add an explanatory note concerning the overall length and to provide a space in which the Administration would record any modifications which might be made during the life of the ship.

Mr. BONN (Canada) said that in many cases the port authorities were accustomed to volumes expressed in cubic feet and urged that that unit should appear alongside the cubic metres.

Mr. ROCQUEMONT (France) supported the suggestion that the names of the shipyard and the owner should be shown on the tonnage certificate. In his view, the calculation of the gross and net tonnages, with the conversion factor, should be shown on the reverse of the certificate, because otherwise the Conference might be accused of deliberate obscurity.

Mr. CHRISTIANSEN (Norway) agreed with the representative of France about the references to the owner and builder and suggested that the date on which the ship had been delivered should also be shown.

Mr. MUENCH (Israel) asked that the dates in the fourth column on the front of the certificate should be expressly indicated, instead of a mere reference to the articles of the Convention.

Mr. WILSON (UK) said he could not see the point of including on the tonnage certificate information which was already given in the ship's register. He regretted, on the other hand, that the working group had not kept on the back of the certificate the sketch which had appeared in the original version.

Mr. PROHASKA (Denmark) pointed out a slight error on the front of the certificate; The formula should be as follows: "This is to certify that the tonnages of this ship have been ascertained

With reference to the tonnage calculation, he pointed out that the Load Line Convention indicated the results but not the detailed calculation of the freeboard.

Mr. PRIVALOV (USSR) thought that the working group had shown wisdom in limiting the information to be given on the tonnage certificate and in not requiring the inclusion of information which was already shown in the ship's register. In regard to the main dimensions, it would be useful to mention the regulations which laid down how they were to be measured. Again, the working group had rightly fought shy of giving the impression that dual tonnages were involved by including a second figure. The regulation dealing with the closing of open spaces was useful for verification purposes and this would be made easier if a sketch was included in the document. The value of the blank page which the representative of Norway had advocated was not immediately obvious; at all events it would not be needed to show any change of flag, because in such a case the tonnage certificate would have to be modified, too.

The CHAIRMAN, summing up the points of agreement, said that there was a majority in favour of deleting the word "tons" in gross and net tonnage. To meet the point made by the representative of Denmark the signed statement would have to read: "This is to certify that the tonnages of this ship have been ascertained...".

There was less general agreement on how to indicate the main dimensions. Was it, for example, adequate to write "length" instead of "overall length" and to refer to the regulation which indicated how the length was to be calculated?

Mr. CABARIBERE (France) thought it was essential to keep the expression "overall length".

Mr. WILSON (UK) acknowledged the validity of the objection. The reason for including the main dimensions on the certificate was to facilitate verification, but was it necessary to mention a length which could be easily verified?

Mr. GUPTA (India) thought it was perhaps enough that the length was shown on the ship's register.

Mr. SASAMURA (Committee Secretary) pointed out that the indications required by the Conventions were intended only to show whether or not the ship was longer than 24 metres, and not to enable control officers to verify the length.

Mr. ERIKSSON (Sweden) said he thought there were other ways of identifying a ship than by measuring its length.

The CHAIRMAN said it had been proposed and seconded that only the word "length" should be mentioned, without any other details, reference being made to the articles in the Convention on Load Lines which laid down the methods of calculation.

The proposal was approved by 30 votes to 4.

Mr. HABACHI (Observer, Suez Canal Authority) pointed out that the ship's register was not always kept on board and that port authorities needed to know the dimensions of ships.

The CHAIRMAN invited the Committee to discuss the question of whether, as in the case of length, only the word "breadth" should be mentioned, reference being made to the definition contained in the Convention on Load Lines.

Mr. HABACHI (Observer, Suez Canal Authority) asked why it was necessary to refer to another convention instead of drawing up a self-contained document.

Mr. WILSON (UK) considered that it was easier to speak of overall breadth than overall length.

Mr. FILIPPOVICH (USSR) enquired why dimensions should be recorded on the tonnage certificate at all. If it was for identification, that was no longer necessary. If it was for the convenience of port authorities, that was quite a different matter. The question was to know what was intended.

The CHAIRMAN thought that an indication of the moulded depth was essential, but that the usefulness of the other two dimensions was less obvious.

Mr. ERIKSSON (Sweden) pointed out that it was unnecessary to mention length on the tonnage certificates since it was already given on the load line certificate.

The CHAIRMAN said he inclined to the conclusion that length and breadth need not be mentioned and that an indication of the depth would be sufficient.

Mr. CABARIBERE (France) thought that in that case it might have been simpler to indicate only gross tonnage and net tonnage on the load-line certificate.

The CHAIRMAN noted that there was a majority in favour of retaining the main dimensions on the tonnage certificate. Since length had already been defined by reference to the Convention on Load Lines, the same could be done for breadth.

The proposal was approved by 20 votes to 3.

Mr. de JONG (Netherlands) recalled that in the Convention on Load Lines the length had to be known in order to determine whether the ship was over 24 metres in length. The overall length and overall breadth should be given on the first page of the document, and all information concerning load-lines on the second page.

Mr. WILSON (UK) felt that, since length was indicated by reference to Article 2(8), it would be normal to define the other two dimensions similarly.

The CHAIRMAN remarked that there was no longer any objection to that proposal, and invited the Committee to consider another point - namely, the suggestion by the Observer of the Suez Canal Authority, supported by Norway, that the names of the ship-builder and shipowner and the date of delivery should be mentioned on the tonnage certificate.

Mr. HABACHI (Observer, Suez Canal Authority) proposed that the Committee should see a specimen of a ship's registration papers so as to determine whether it met the Committee's requirements.

Mr. STITT (USA) felt that there was no objection to recording any information which was not likely to be altered, such as the name of the shipbuilder and the delivery date. The name of the shipowner was quite another matter, however, for if that were recorded on the tonnage certificate the certificate would have to be changed when the ship changed hands.

Mr. SEAGO (UK) pointed out that arguments for and against that proposal had been discussed in the working group. There were a number of certificates in existence which did not bear the information in question, and that did not give rise to difficulties. Why should the same not apply to the tonnage certificate?

The CHAIRMAN put to the vote the question of whether the name of the shipbuilder should be included on the tonnage certificate.

The votes were equally divided, 12 in favour and 12 against.

The proposal was not approved.

Mr. de JONG (Netherlands) said that it was sometimes difficult to know who the shipbuilder was, for instance, when a ship was built in sections.

Mr. WILSON (UK) urged that only information relating to tonnage should be mentioned on the tonnage certificate.

Mr. NOZIGLIA (Argentina) thought it necessary to mention the name of the shipowner since, if the ship changed hands, a new certificate might have to be issued.

The CHAIRMAN pointed out that the General Committee had decided to omit the regulation concerning change of ownership.

Mr. KING (Kuwait) suggested that where an Administration required the name of the shipowner, it should request that information on the port entry papers.

The CHAIRMAN put to the vote the question of whether the name of the shipowner should be included on the tonnage certificate.

The proposal was rejected by 20 votes to 6.

The CHAIRMAN put to the vote the question of whether the delivery date should be included on the tonnage certificate.

The proposal was rejected by 20 votes to 4.

Mr. de JONG (Netherlands) suggested that, in order to ensure that the tonnage certificate did in fact refer to the ship in question, the number should be altered in the event of any change.

Mr. PROHASKA (Denmark) thought that it was unnecessary to indicate the number of passengers on the second page of the tonnage certificate. The important thing was to give details which would enable the ship to be identified. The second page should be as simple as possible.

The CHAIRMAN drew the Committee's attention to the problem of applying Regulation 5(3), which provided that when the characteristics of a ship were altered, a new international tonnage certificate should be issued, but that the value of the

net tonnage shown on that certificate should be the same as that shown on the current certificate until twelve months had elapsed. In that case the information on pages 1 and 2 would no longer agree and the impression might be created that the owner had falsified the figures. It might therefore be advisable to leave a blank space on the second page to indicate whether Regulation 5(3) had been applied.

Mr. CUNNINGHAM (USA) thought that that question would raise no problem provided the Regulation was interpreted correctly. It might perhaps be possible to word the phrase concerning the twelve month period somewhat more simply.

Mr. CHRISTIANSEN (Norway) thought that the second page should be left blank. In his opinion there would be little point in referring to particular regulations, as the port authorities would not take the trouble to look up all the details.

Mr. CUNNINGHAM (USA) recalled that the working group had discussed the matter and that it had been suggested that the date on which the tonnage had been reduced should be recorded on the certificate.

The CHAIRMAN thought that the suggestion of including a blank page for observations might be the answer to the problem.

That proposal was adopted by 15 votes to 1.

The CHAIRMAN reminded members that it had been suggested that the second page should be altered to contain details of the spaces included in the tonnage.

That proposal was rejected by 17 votes to 15.

The CHAIRMAN said that the Committee had to decide whether to include mention of the total number of passengers.

Mr. CHRISTIANSEN (Norway) did not think it necessary to record the number of passengers on the certificate. The figure was already given on the ship's papers.

Mr. SEAGO (UK) thought it essential that the number of passengers shown on the certificate should tally with the number of passengers indicated in the formula $N_1 + N_2$, which had been adopted for the determination of net tonnage. The working group had regarded the passenger figure as a means of verifying the net tonnage.

Mr. PROHASKA (Denmark) felt that port authorities would not take the trouble to verify the figures on a certificate issued by the competent authorities of a country. In his view, the second page served no useful purpose. If the Committee thought it absolutely essential to indicate the number of passengers, that figure could appear at the bottom of the first page.

The CHAIRMAN pointed out that it was essential to include details of the number of passengers and spaces for the application of Regulation 5.

Mr. CHRISTIANSEN (Norway) agreed with the representative of Denmark that the second page was unnecessary.

Mr. WILSON (UK) said he thought the number of passengers should appear on the certificate because it would play a part in the calculation of net tonnage under the formula which had been adopted for that purpose. It was a vital piece of information for port authorities.

Mr. PRIVALOV (USSR) also thought that factors such as the number of passengers and the draught, which served to determine net tonnage, should be recorded on the certificate; they provided a means of verification.

Mr. SEAGO (UK) reminded members that the working group had drawn up the tonnage certificate on the basis of the regulations which had been established and, in particular, of Article 12 of the Convention relating to control. The number of passengers and the draught played a considerable part in the determination of the tonnage. If those indications were not included in the certificate, the Conference would be failing to supply the means of exercising the control for which that Article provided.

Mr. ROCQUEMONT (France) urged that the number of passengers should be retained on the certificate.

Mr. PROHASKA (Denmark) said that when he had questioned the need to indicate the number of passengers, he had not been aware of the provisions of Article 12. He now therefore agreed that that figure should be included but, in his opinion, it should appear on the first page.

After an exchange of views in which Mr. GUPTA (India), Mr. de JONG (Netherlands) and Mr. MUENCH (Israel) took part, the CHAIRMAN put to the vote the question of retaining the figures for the number of passengers and the draught on the certificate.

The Committee decided, by 28 votes to one, to retain those figures.

Mr. PROHASKA (Denmark) thought that all open and enclosed spaces should be mentioned on the certificate. He was in favour of page 2 in the form in which it had been submitted by the working group:

Mr. SEAGO (UK) considered that if the certificate were to mention all the spaces that were not included in the gross and net tonnages, the initial measurement would be greatly complicated.

Mr. OMAR (United Arab Republic) asked whether the certificate would include sketches.

It was decided, by 20 votes to 11, that no sketches would appear on the certificate.

Mr. MUENCH (Israel) recalled that he had suggested that, on the first page, the dates themselves should be indicated and not the articles, as proposed by the working group.

The CHAIRMAN thought the Drafting Committee might consider that suggestion.

It was so decided.

Mr. de JONG (Netherlands) said he was in favour of indicating the freeboard and the number of the load line certificate.

Mr. WILSON (UK) pointed out that load line certificates were changed every four or five years whereas the tonnage certificate might not be altered for many years. If the number of the load line certificate were indicated, the tonnage certificate would have to be altered.

The Committee decided, by 25 votes to one, to mention only the moulded draught.

Mr. SASAMURA (Secretary of the Committee) thought the Secretariat would have some difficulty in establishing the text of the certificate to be submitted to the Drafting Committee for consideration. He therefore suggested that the members of the working group assist the Secretariat in drafting a text which would first be submitted to the Technical Committee, before being considered by the Drafting Committee.

It was so decided.

Regulations 3 and 4

The CHAIRMAN invited the Committee to examine the proposed re-draft of Regulations 3 and 4 contained in TM/CONF/C.2/WP.42/Add.1.

Mr. PROHASKA (Denmark) proposed that the text of Regulation 4 (Net Tonnage) should be clarified by the insertion, after the formula, of the explanatory sentence "In this formula the factor $(\frac{4d}{3D})^3$... etc.", taken from Annex XIII to TM/CONF/C.2/WP.19/Add.3 and by the deletion of the corresponding items from the definitions in paragraphs (1) and (3) of TM/CONF/C.2/WP.43/Add.1.

It was so decided.

The CHAIRMAN, referring to the definition of $N_1 + N_2$, enquired what action the Committee wished to take in regard to the alternatives placed in square brackets - "ship's certificate" and "International Tonnage Certificate (1969)".

Mr. GUPTA (India) suggested the adoption of the term "passenger certificate", which had been widely used for many years to denote the Safety Certificates.

Mr. MURRAY SMITH (UK) said it was important to be specific, as ships had many different certificates. He suggested the use of the term "International Passenger and Safety Certificate" in the case of ships engaged on international voyages and "Passenger Certificate" in other cases.

The CHAIRMAN proposed that the words in square brackets should be replaced by the term "Ship's Passenger Certificates".

The Chairman's proposal was adopted.

Mr. PROHASKA (Denmark) thought it advisable to include a definition of the "cabins" referred to in connexion with factors N_1 and N_2 . Members of the Committee understood that the reference was to cabins containing not more than eight berths, but the point should be made clear in the text.

The CHAIRMAN suggested that the definitions should read as follows:

N_1 = total number of passengers in cabins containing not more than 8 berths,

N_2 = total number of other passengers.

It was so decided.

Document TM/CONF/C.2/WP.42/Add.1, as amended, was approved.

Regulations 1-7

The CHAIRMAN invited the Committee to consider those portions of document TM/CONF/C.2/WP.42 on which a decision had not yet been taken. He pointed out that pages 1-5 and Regulations 3-4 had already been dealt with.

Mr. MÜNICH (Federal Republic of Germany) suggested that the definitions of "weathertight" and "breadth" should be inserted, as previously agreed.

It was so decided.

The CHAIRMAN proposed that in Regulations 5(1) and (3) the square brackets should be removed and the term " N_3 " should be deleted.

It was so decided.

Mr. WILSON (UK) pointed out that paragraph (ii) of Regulation 5(3), in square brackets, should be deleted, in accordance with the decision of the General Committee.

It was so decided.

Mr. MURRAY SMITH (UK) stated that the reference to alterations or modifications "of a major character" in Regulation 5(3)(iii) was too vague, and suggested the replacement of the last three lines of the sub-paragraph by the words "involving a change in gross tonnage of 10 per cent or more".

Mr. MÜNNICH (Federal Republic of Germany) said he understood that the General Committee was no longer in favour of the wording suggested by the United Kingdom representative.

Mr. MURRAY SMITH (UK) said that the same information had just reached him and he would withdraw his proposal.

Mr. CUNNINGHAM (USA) said he assumed that the words "and displacement" would be deleted throughout Regulations 6 and 7.

The CHAIRMAN said that that would be done.

Mr. GRUNER (Finland) suggested that some mention should be made of the logarithmic formula.

The CHAIRMAN said it would be mentioned in the table which was to be appended. He suggested that when the table was drafted the points should be chosen so that a straight interpolation would still keep the order of approximation mentioned at the previous meeting.

Mr. MURRAY SMITH (UK) said his delegation hoped to provide three sets of intervals from which the Committee could choose.

The CHAIRMAN said that discussion of TM/CONF/C.2/WP.42 was completed.

STATEMENT ON BEHALF OF FRENCH PORT AUTHORITIES

Mr. PAGES (France) said that, in his capacity as Manager of the Port of Bordeaux, he wished to make some observations on behalf of a group of users of the tonnage measurement regulations - the French port authorities.

He understood the Conference's desire that the new tonnages should be widely used as a basis for the assessment of port dues and pilotage and towing charges. The authorities responsible for levying those charges enjoyed a wide measure of freedom, however, and in order to secure widespread adoption,

TM/CONF/C.2/SR.24

the system would have to be as simple and logical as possible, free of ambiguity and capable of being checked rapidly by officials of average skill, and the certificates presented must be entirely above suspicion. Finally, there must be only one tonnage system for each ship, regardless of draught or load.

It was clear that shipowners and shipping authorities wanted to benefit by the lowest possible port charges. The port authorities had the same objective; there was keen competition between ports, both nationally and internationally.

The port authorities were interested in two criteria: the external features of a ship (length, breadth and draught) which governed the design of locks and canals, and the commercial capacity, and they were anxious that the new tonnage measurement system should reflect those two criteria very clearly. They took full account of the commercial needs of shipping and often gave favourable terms to ships loading or unloading small quantities of cargo or to special types of ships, such as liners, cruise ships and vehicle ferries.

If the port authorities gained the impression that their hand was being forced by new regulations intended systematically to reduce tonnages, they would be forced to raise their charges. Again, if the new tonnage measurement regulations were too complicated, illogical or artificial, the port authorities would become suspicious and would either ignore the regulations completely - assigning their own dues - or add to existing taxes a safety margin to cover doubtful cases. That would be against the interests of shipowners.

Finally, it was to be hoped that the new regulations would not have an unfavourable effect on ship design and construction or militate against a rational structure for port charges.

Mr. de JONG (Netherlands) said the Committee had fulfilled all the previous speaker's requirements except for the stipulation that ships should have only one tonnage regardless of draught. It was difficult, however, to reconcile that stipulation with the speaker's statement that authorities needed to know the length, breadth and draught of every ship. The Committee believed that draught was an important criterion in tonnage measurement, and a correction had been made for draught in the formula for net tonnage, though not in the formula for gross tonnage.

The CHAIRMAN said the comments of the two previous speakers would be noted. The Committee had now completed its work, unless the Conference should decide to refer any further matters to it, and he wished to thank all those who had co-operated in enabling it to achieve its tasks.

Mr. CHRISTIANSEN (Norway) and Mr. GUPTA (India) thanked the Chairman for his great patience and competence.

The meeting rose at 6.10 p.m.