

Manuscript Submission (International Journal of Maritime Science and Technology - NASEMORE)

From: zakki ahmad (ahmadzakki@yahoo.com)

To: nasemore@unidu.hr

Date: Friday, 13 November 2020 at 04:49 pm GMT+7

Dear

Editor-in-Chief

International Journal of Maritime Science and Technology (NASE MORE)

Herewith we are pleased to submit an original research article entitled "On the Development of Catamaran Hull Form for Fish Processing Vessel to Support Domestic Fishing Activities in Indonesia" by Ahmad Fauzan Zakki, Deddy Chrismianto, Aulia Windyandari and Rizaldy Ilham for consideration to be published on the *International Journal of Maritime Science and Technology (NASE MORE)*.

In this manuscript, we show that the new catamaran hull form design of fish processing vessel is proposed and investigated, especially on the resistance, intact stability, and seakeeping performance on the Indonesia Sea Territorial Environment. Furthermore the modelling wave spectra of Indonesia Sea Territorial Environment, the new approach on the resistance estimation and the comparison with the previous developed mono hull type also have been discussed.

We believe that this manuscript is appropriate for publication by the *International Journal of Maritime Science and Technology (NASE MORE)* because it present new research and the development in the field of naval architecture and marine technology(engineering). Our manuscript creates a paradigm for future studies of the evolution of fish processing hull form, especially for the application catamaran to support the fishing activities in Indonesia Sea Territorial Environment.

With the submission of this manuscript I would like to undertake that:

- All authors of this research paper have directly participated in the planning, execution, or analysis of this study;
- All authors of this paper have read and approved the final version submitted;
- The contents of this manuscript have not been copyrighted or published previously;
- The contents of this manuscript are not now under consideration for publication elsewhere;
- The contents of this manuscript will not be copyrighted, submitted, or published elsewhere, while acceptance by the Journal is under consideration;
- There are no directly related manuscripts or abstracts, published or unpublished, by any authors of this paper;
- Diponegoro University representative is fully aware of this submission.

Thank you for your consideration!

Sincerely,

Ahmad Fauzan Zakki, PhD

Naval Architecture Department

Diponegoro University



Submitted Manuscript.pdf

1MB

RE: OUR SEA : International Journal of Maritime Science & Technology - STATUS OF PAPER

Davorka Turčinović <davorka.turcinovic@unidu.hr>

Mon 3/29/2021 3:52 PM

To: Ahmad Fauzan Zakki <ahmadfauzanzakki@lecturer.undip.ac.id>

Dear Author, we have received your paper. We will contact you as soon as the reviewers give feedback.

Best regards,



Davorka Turčinović, mag. oec.

Head of the Publishing

University of Dubrovnik

Publishing & Marketing Department

a: Ćira Carića 4 / 20000 Dubrovnik

e: davorka@unidu.hr; izdavastvo@unidu.hr

w: <https://www.unidu.hr/>

p: +385 (0) 20 445 708

Go green, keep it on the screen & think before you print!

From: Ahmad Fauzan Zakki [mailto:ahmadfauzanzakki@lecturer.undip.ac.id]

Sent: Friday, March 26, 2021 10:55 AM

To: Davorka Turčinović

Subject: Re: OUR SEA : International Journal of Maritime Science & Technology - STATUS OF PAPER

Dear Editor in Chief

Herewith we send the 1st revision manuscript and the outlining 1st review reports for the reviewers (letter to reviewers). Hopefully our submitted manuscript can be accepted to be published on Nasemore (International Journal of Maritime Science & Technology)

Kind Regards

Zakki

From: Davorka Turčinović <davorka.turcinovic@unidu.hr>

Sent: Wednesday, March 3, 2021 1:26 AM

To: Ahmad Fauzan Zakki <ahmadfauzanzakki@lecturer.undip.ac.id>; Deddy Chrismianto <deddychrismianto@lecturer.undip.ac.id>; Aulia Windyandari <auliawindyandari@lecturer.undip.ac.id>; rizaldyilham98@gmail.com <rizaldyilham98@gmail.com>

Subject: OUR SEA : International Journal of Maritime Science & Technology - STATUS OF PAPER

Dear Authors,

your paper „On the Development of Catamaran Hull Form for Fish Processing Vessel to Support Domestic Fishing Activities in Indonesia“ has been reviewed. Reviewers asked minor changes in paper.

REVIEWER_1:

The paper represents an interesting research of the catamaran hull form for Fish Processing Vessel and the influence of the demi hull spacing ratio on the important ship characteristics, e.g. resistance, stability and

seakeeping. Although I think the research is performed nicely and the results are consistent, I have few remarks and suggestions.

Remarks are mostly related to the English language (mostly grammar and punctuation). Large number of sentences has grammatically incorrect construction which makes paper hard to read. For example:

„Therefore, the catamaran is still become a good alternative hull form geometry to improve the transverse stability and to increase the service speed.”

“The previous intact stability analysis do not appropriately method to describe the dynamic phenomena of the vessel during the operational fishing activities.”

“However the monohull have offer better heave and pitch damping motion, and it is also important factors for the vessel motion performance, particularly on the seaways that head sea is regularly occurred.”

...several more sentences also should be written more clearly.

Next, before usage of abbreviations, the same should be explained in the text, like ILO. It is better to say “Length between perpendiculars” then “Length of perpendiculars”.

Also, Figures 4 and 5 appear in the text before Figure 3 which should not happen.

References of the HSC Code 2000-MSA 97(73) is missing?!

Suggestions and questions?!

Does the Table 2 refer to the deadweight of 750 t?!

Please elaborate in the text which empirical method is used for calculation of total resistance (e.g. Holtrop method) and is it valid for high values of Fn number?! Also, please elaborate how much some other, complex method, like CFD would change the results?!

Regarding, intact stability check it would be nice if you could elaborate which of six criteria refer to the dynamic stability. Also, it would be nice if you could provide dynamic stability graphs?!

In the seakeeping analysis you have mentioned various sea spectrums, but you didn't use them in the analysis since you have plot the RAO instead of response spectrum. Therefore, there is no need to explain in detail the sea spectrums.

REVIEWER_2: (also please see attachment)

This is a nice paper and I congratulate the authors for the good work. Although I recommend to accept this paper with minor correction, the correction should be done and I need to check and make sure that it has been done properly.

The summary should be revised and rewritten. It does have qualitative information of the result, but the quantitative data is not available. Short description of detail of research is not available, either. Plus, there is no comparative study with published papers to support the findings.

Introduction is OK and well explained and supporting the current paper. Research statement is mentioned clearly together with the stages of the study. However, some references only mentioned shortly, such as „ ...the small and medium size fishing boats [5-8].” It is OK for a paper conference but not for a journal paper. Readers need to know what have been done within those references. Authors are suggested to clarify this.

Literature Study is OK and containing many previous related studies, but some lack of reference and it has been noted in the corrected paper provided. Again, the statement “...also can be found in the following articles [13-24], needs short explanation of the references 13 to 24. Also with “....can be seen in the following papers [28-36].”

Preliminary Catamaran Hull Form Development. The authors using existing data from fast passenger catamaran to develop a fish processing catamaran. The two types of vessel are completely for different purposes thus the authors should explain their ideas properly, which is at present not available. The authors are also asked to check the correctness of the existing vessel data. Some are not correct due to the internet information.

Estimation of Resistance, Intact Stability, and Seakeeping Behavior. It is well explained and the standard formula for the resistance estimation of catamaran is written correctly. However, the authors forgot to write other basic formula: the ITTC-1957 for estimating the skin friction. Further, Equations (3) to (8) is referred to Ref. [43]. The authors are suggested to also quote Ref. [43a] for further detail, and this is given in the list of references. The intact stability is well exposed referring to the IMO criteria, but relevant formula is not available. The seakeeping performance calculation is also described properly. But again, there is no relevant formula provided. The authors are suggested to provide (at least) the JONSWAP formula which is finally used for the seakeeping performance calculation.

Results and Discussion. The resistance analysis is well presented and well discussed based on the proposed prototype. The authors are asked to compare it with the existing vessel data, which is used to derive the geometry

of the current vessel. It is needed for comparative purposes. Both intact stability and seakeeping performance are well described and discussed. But again, comparative study with the existing vessels are required to support the findings.

Conclusion is OK and well presented and no further comments on it.

Acknowledgement needs the country's name and source of funding, including the contract number.

References. The numbers of references are adequate and up to date. Some of them need to be corrected and are given in the corrected papers provided.

Others. There are many grammatical errors such as lacking of comma, incorrect preposition, tenses, etc. All are corrected and given in red colour and can be found in the corrected paper provided. Also, the notation of Froude Number (F_n) should be changed according to ITTC with 'Fr.'

REVIEWER_3:

Improving the hulls of fish processing vessels should be considered very progressive in terms of economy and security. Therefore, the presented study of catamaran hull forms is relevant and interesting for research and applications. The presented evaluations of total resistance show that total resistance of the catamarans can be reduced without loss of stability and seakeeping characteristics.

However, some aspects of the study are insufficiently covered. The authors argue that "The principal dimension was determined using the linear regression equation model". But the corresponding regression equation/equations are not presented in the text. The shape of the demi hull, shown in Fig. 2c, is insufficiently substantiated. Additional research may be needed to develop a shape with less hydrodynamic resistance.

Please correct the values of s/L in Section "Conclusion". Is this ratio 0.4 or 4?

The manuscript can be published after some improving.

Please correct paper till **March 30**, and send me back corrected version. Also write **letter to reviewer** where you will write what corrections you made in paper.

Best regards,



Davorka Turčinović, mag. oec.

Head of the Publishing

University of Dubrovnik

Publishing & Marketing Department

a: Ćira Carića 4 / 20000 Dubrovnik

e: davorka@unidu.hr; izdavastvo@unidu.hr

w: <https://www.unidu.hr/>

p: +385 (0) 20 445 708

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RE: OUR SEA : International Journal of Maritime Science & Technology - second round of reviews

Katarina Banović <katarina.banovic@unidu.hr>

Tue 5/25/2021 2:49 PM

To: Ahmad Fauzan Zakki <ahmadfauzanzakki@lecturer.undip.ac.id>

Dear Authors,

We received your corrected paper.

Thank you very much.

Bets regards,



Katarina Banović, mag. oec.

University of Dubrovnik

Publishing & Marketing Department

a: Ćira Carića 4 / 20000 Dubrovnik

e: katarina.banovic@unidu.hr; izdavastvo@unidu.hr

w: <https://www.unidu.hr/>

p: +385 (0) 20 445 706

Go green, keep it on the screen & think before you print!

From: Ahmad Fauzan Zakki [mailto:ahmadfauzanzakki@lecturer.undip.ac.id]

Sent: Monday, May 24, 2021 3:24 PM

To: Katarina Banović

Subject: Re: OUR SEA : International Journal of Maritime Science & Technology - second round of reviews

Dear Editor in Chief

Herewith we send the 3rd revision manuscript and the outlining 3rd review reports for the reviewers (letter to reviewers). Hopefully our submitted manuscript can be accepted to be published on Nasemore (International Journal of Maritime Science & Technology)

Kind Regards

Zakki

From: Katarina Banović <katarina.banovic@unidu.hr>

Sent: Monday, May 24, 2021 2:34 PM

To: Ahmad Fauzan Zakki <ahmadfauzanzakki@lecturer.undip.ac.id>

Subject: RE: OUR SEA : International Journal of Maritime Science & Technology - second round of reviews

Dear Authors,

your paper „On the Development of Catamaran Hull Form for Fish Processing Vessel to Support Domestic Fishing Activities in Indonesia“ the reviewers looked again.

One of the reviewers asked some minor changes in paper.

REVIEWER_2:

The authors have answered almost all of the previous questions very well. However, the physical explanation of Fig. 6 where the total resistance of the four configurations is maximum at $Fr = 0.61$ is not made clear. The authors are suggested to read the textbook made by Molland, Turnock, and Hudson entitled 'Ship resistance and propulsion, practical estimation of ship propulsion power' published in 2017 by Cambridge University Press. The authors can make similar explanation regarding Fig. 7.29 in that textbook.

Please correct paper till **June 1**, and send me back corrected version.

Best regards,



Katarina Banović, mag. oec.

University of Dubrovnik

Publishing & Marketing Department

a: Ćira Carića 4 / 20000 Dubrovnik

e: katarina.banovic@unidu.hr; izdavastvo@unidu.hr

w: <https://www.unidu.hr/>

p: +385 (0) 20 445 706

Go green, keep it on the screen & think before you print!

From: Ahmad Fauzan Zakki [mailto:ahmadfauzanzakki@lecturer.undip.ac.id]

Sent: Monday, April 19, 2021 5:06 PM

To: Davorka Turčinović

Subject: Re: OUR SEA : International Journal of Maritime Science & Technology - second round of reviews

Dear Editor in Chief

Herewith we send the 2nd revision manuscript and the outlining 2nd review reports for the reviewers (letter to reviewers). Hopefully our submitted manuscript can be accepted to be published on Nasemore (International Journal of Maritime Science & Technology)

Kind Regards

Zakki

From: Davorka Turčinović <davorka.turcinovic@unidu.hr>

Sent: Monday, April 12, 2021 2:53 PM

To: Ahmad Fauzan Zakki <ahmadfauzanzakki@lecturer.undip.ac.id>; Aulia Windyandari <auliawindyandari@lecturer.undip.ac.id>; Deddy Chrismianto <deddychrismianto@lecturer.undip.ac.id>; rizaldyilham98@gmail.com <rizaldyilham98@gmail.com>

Subject: OUR SEA : International Journal of Maritime Science & Technology - second round of reviews

Dear Authors,

your paper „On the Development of Catamaran Hull Form for Fish Processing Vessel to Support Domestic Fishing Activities in Indonesia“ the reviewers looked again. Reviewers asked some changes in paper.

REVIEWER_1:

Thank You for Your revised paper.

However, I still have few remarks and comments. Please reformulate or better elaborate next sentences due to following reasons?!

a) Grammar is wrong in the next sentence.

“The stable hull should have a positive metacentre height which is the position of metacentre point (M) is higher than the centre of gravity (G) of the vessel.”

b) Next sentence doesn't make any sense. Hull geometry and wave spectrum are both important for the seakeeping analysis. One doesn't exclude the other.

“Therefore, instead of the accurate hull geometry, the suitable wave spectrum was selected to represent the sea environment.”

c) What higher requirements?? JONSWAP spectrum is usually used for enclosed waters.

“Additionally, the JONSWAP spectrum also represents the higher requirements compared to the others.”

d) Please elaborate next conclusion?! Is this valid only for Beam sea, since Fig. 12 and 13. for Head and Bow Quartering Sea show completely opposite results?!

“The phenomena can be explained by the magnitude of the heave motion damping is determined by the waterplane area on the baseline. Since the catamarans have a smaller waterplane area than the monohull, the catamaran heave motion damping is relatively low.”

e) In the conclusion, please elaborate what are restrictions of choosing the larger demi hull spacing ratio, as it seems that the large demi hull spacing ratio has the best maritime characteristics regarding resistance and stability?

REVIEWER_2:

Correction for Summary and Introduction have been done as requested.

Literature Study

Previously I asked the authors to provide short explanation of the references 13 to 24 and 28 to 36, but the authors refused to do that and said because they are supporting references. All are important and readers need to know those. I ask the authors again to do my request. If you still do not agree, please choose some of them which are very important to your paper and provide short explanations. The remainings should be crossed out.

Results and Discussions

Symbol of Froude number is Fr according to ITTC and not Fn. Some have been changed, but some remained as before.

The authors said that 'The total resistance has an escalation trend until the vessel speed has reached 35.71 knots (Fr=0.61)'. It occurs at all s/L ratios. It is a very interesting phenomena and the authors should explain what it is all about and why. Further, the authors should give units for RT in Figure 6. Also, the authors should describe if they use the constant WSA for the calculation, whilst it changes as the Froude number increases and hence the lift force appears.

The scale of Figure 11 (c) in x-direction is not the same as the other two. Further, the same case occurred at Figure 14 (c).

It is written “The motion root means square results can be seen in Table 6 – Table 8”. I suggest making it as “.....in Tables 6 to 8.” Further, the authors are asked to provide with Figures of the three tables and explain the differences, in particular why the pitching characteristics of monohull are better than the catamaran.

References

Many references are cited wrongly. Ref [25] was cited as Kogan but in fact from Wellicome et al. (1995). Furthermore, Lee [26] in fact it is Chang (1995), Faltinsen et al. [27] in fact it is Fang et al. (1996). I do ask the authors to check and improve the entire citations and list of references must be correct according to the citations.

Please correct paper till **May 3**, and send me back corrected version. Also write **letter to reviewer** where you will write what corrections you made in paper.

Best regards,



Davorka Turčinović, mag. oec.

Head of the Publishing

University of Dubrovnik

Publishing & Marketing Department

a: Ćira Carića 4 / 20000 Dubrovnik

e: davorka@unidu.hr; izdavastvo@unidu.hr

w: <https://www.unidu.hr/>

p: +385 (0) 20 445 708

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Re: Nase more_3_2021

Ahmad Fauzan Zakki <ahmadfauzanzakki@lecturer.undip.ac.id>

Tue 9/14/2021 3:19 PM

To: Katarina Banović <katarina.banovic@unidu.hr>

Dear Editor

We confirm that the corrected paper can be published on the Nase more

Kind regards
ZakkiGet [Outlook for Android](#)

From: Katarina Banović <katarina.banovic@unidu.hr>**Sent:** Tuesday, September 14, 2021 3:08:39 PM**To:** Ahmad Fauzan Zakki <ahmadfauzanzakki@lecturer.undip.ac.id>**Subject:** RE: Nase more_3_2021

Dear Author,

Thank you for your e-mail.
I'm sending you corrected paper.

Best regards,

**Katarina Banović, mag. oec.****University of Dubrovnik**

Publishing & Marketing Department

a: Ćira Carića 4 / 20000 Dubrovnik

e: katarina.banovic@unidu.hr; izdavastvo@unidu.hr

w: <https://www.unidu.hr/>

p: +385 (0) 20 445 706

Go green, keep it on the screen & think before you print!

From: Ahmad Fauzan Zakki [mailto:ahmadfauzanzakki@lecturer.undip.ac.id]**Sent:** Monday, September 13, 2021 4:41 PM**To:** Katarina Banović <katarina.banovic@unidu.hr>**Subject:** Re: Nase more_3_2021

Dear editor

We are very appreciating that our submitted manuscript will be published on the next issue. Regarding the last version of the manuscript, we found that the equation in Table 2 is missing. Therefore, we attach the 3rd revision manuscript as your reference for the missing equation.

Hopefully our accepted manuscript can be published on schedule

Kind Regards
Zakki

From: Katarina Banović <katarina.banovic@unidu.hr>
Sent: Monday, September 13, 2021 4:40 PM
To: Ahmad Fauzan Zakki <ahmadfauzanzakki@lecturer.undip.ac.id>; Deddy Chrismianto <deddychrismianto@lecturer.undip.ac.id>; Aulia Windyandari <auliawindyandari@lecturer.undip.ac.id>; rizaldyilham98@gmail.com <rizaldyilham98@gmail.com>
Subject: Nase more_3_2021

Dear Authors,

Your paper will be published in journal Nase more no 3, 2021.
I am sending your paper in PDF. Please let me know is everything ok so that the paper can be published.

Best regards,



Katarina Banović, mag. oec.

Sveučilište u Dubrovniku

Služba za izdavaštvo i marketing

a: Ćira Carića 4 / 20000 Dubrovnik

e: katarina.banovic@unidu.hr; izdavastvo@unidu.hr

w: <https://www.unidu.hr/>

t: +385 (0) 20 445 706

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