Comment number	Comment	Authors' responses
1	The theme of this manuscript is focused on MASS. At first, I read this article with strong interest, but unfortunately, I didn't get the results that I wanted to see until the conclusion. The all used data is based on conventional ships. The control type and operation features of MASS have not been considered. The structure and function of the shore control center also are not specified. The training scenarios should be different in levels of autonomy, etc. None of these questions have been answered, which is the deadliest problem of this manuscript. The training of MASS remote operators is the possible application of this manuscript, but it is not specifically designed for MASS.	Thank you for the kind comment. The comment is clearly indicating a issue that relates to the MASS. The authors agree that the features related to MASS, including the shore control center and control type, should be added to the manuscript when it's specifically designed for MASS. However, as a part of the project titled "Development of Smart Port−Autonomous Ships Linkage Technology," supported by the Ministry of Oceans and Fisheries, Korea, we conducted this research to develop the training simulator for Shore Remote Control Officer (SRCO). The research findings will be applied to the generation process of navigation scenarios of the SRCO training simulator in the year 2023; hence the purpose of the research was to propose specific criteria for dividing difficulties of navigation and validate if the criteria were reasonable or not. As you mentioned in the comment, "The training of MASS remote operators is the possible application of this manuscript" was correct. Some day in the next year, the features of MASS will be considered in another experiment using the SRCO training simulator that will be developed in the project. Then hopefully, your precious comment will finally be applied to our other research.
2	From the introduction, the authors only claimed the application of ST in the maritime field, the potential application or benefits for MASS have not been involved. Especially, There is a serious shortage of cited papers on autonomous ships. Some important and high-value papers have not been cited. If the authors want to establish the link with autonomous ships, the latest reference of autonomous ships needs to be referred. Meanwhile, some features of autonomous ships must be considered, not just the LOA of ship. The phase of operation of MASS needs to be defined, such as L2? L3? L4?	Thank you for your keen observation of the introduction section. As mentioned earlier in comment 1, this research is not directly related to the practical operation of MASS, but rather more related to the development of the training simulator for the remote operator of MASS. However, taking your comment, we added citations related to the MASS in lines 28−30 and revised the title and contents in lines 14−15, 31−33, 56−57.
3	In my view, the paper is more like an interesting generation of difficulty criteria in navigation simulator. The conclusion of difficulty criteria is also obvious, which is not focused on MASS. The title needs to be modified to eliminate unnecessary misunderstandings.	
4	In line 84, 1 mile should be confirmed. 1 mile? Or 1 n mile?	Thank you for the kind comment. We've revised the relevant part in line 84.

5	The discussion is based on the achieved results to a very limited extent. A clear link between the results and their analysis must be established.	Thank you for the precious comment. We've revised the relevant part in line 189-191, 203-204, 234-237.
6	The discussion or conclusions shall discuss the potential uncertainties of the study and its limitations.	Thank you for the precious comment. Taking your comment 1,2,3, 6 together, we revised the relevant part in line 249-252, 255-257, 258-259.
7	Careful proofreading is required, as there exist typos and expressive mistakes.	Thank you for the precious comment. The entire paper was reviewed and revised.