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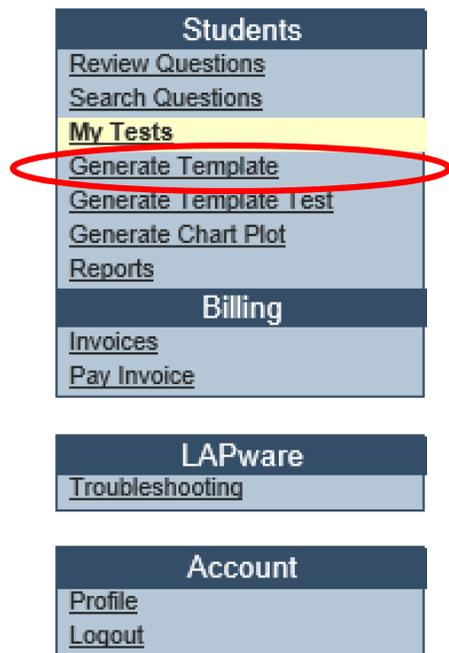


Student/User/Mariner

## GENERATE TEMPLATE and GENERATE TEMPLATE TEST

**LAPWARE** Deck and Engine introduces to ALL users the capability of generating their OWN TEST TEMPLATES. From these templates you can then create ONE test at a time, with answer sheet, which can either be a STUDY TEST (taken numerous times) or a REAL TEST (taken only once). Each subsequent test generated by ANY Student Test Template will OVERWRITE the first one generated, **and its answer sheet**. However, you are allowed to print and/or save to your hard drive the PDF file of questions and the answer sheet. The purpose of only allowing students to generate ONE test from any number of test templates at a time is so that they will not clutter up their screen with hundreds of tests making it more difficult to find other valid and important tests. Students will have the capability of not only deleting the tests they generate BUT will also be able to delete the Test Template they created. NOTE that deleting the test does NOT delete the template. Deleting the template does NOT delete the test generated from the template. The last test created remains until either deleted or overwritten by the next test created.

Here is what your new Main Menu looks like upon logging into **LAPWARE Deck or Engine as a Student**.



Here you generate the template as the base for creating tests.  
Here you generate the test from the template(s) you created.

As a reminder, it is ALWAYS wise to enter at least your first and last name and email address in the Profile menu option.

This is the same feature that Instructors have BUT the files created will be saved only under your directory and no one else can view your Templates or Tests at the student level. If you are using **LAPWARE** under a school license then the Instructor(s) can see what you are doing and assist you when needed but other students cannot see your data. Under the **LAPWARE** University we, as administrators, can see what you are doing and assist you as needed or requested. This feature is being installed so as to allow you the freedom to concentrate on YOUR areas of weakness. NOTE, the delay in providing this feature was in us ASSURING that students cannot see Instructor generated templates and that answer sheets were provided for all tests created.



Before we get into **“Generate Template”** and **“Generate Template Test”** we MUST make this point and make it strongly. It is ALWAYS recommended that students study the subject matter and review all questions using the **“Review Questions”** screen. Do not simply study by taking practice tests of the test modules you will have on your exam or start off using **LAPWARE** by generating and taking test(s). It is very wise to first review ALL possible questions you could be exposed to, based upon our disclaimer on the Review Questions screen. ONLY after a full review and study of the subject matter, it is recommended that practice tests be used to fine tune your skills and knowledge. However, for those studying with the **“Review Questions”** screen, this new **“Generate Template”** and **“Generate Template Test”** will allow students to select categories and take practice tests. Under the REVIEW QUESTIONS screen this feature also exists in that you can select **“Question Filters”** and then switch from **“Study mode”** to **“Test mode”** or **“Training mode”**.

Here is how the **“Generate Template”** works. This is the feature you MUST start off with in order to generate a test from a template. If there is no template created then you cannot create a test.

Click on the **“Generate Template”** in the Main Menu and below is the screen you will see. Note that NO TEMPLATES are listed when first clicking on the **“Select Template”**, since none have been created.



Within **LAPWARE**, category filtering is used. You will see this filtering capability momentarily, if you are unfamiliar with it. Note that under the Main Menu there is a **“REPORTS”** menu option – **“CATEGORY”** – where you can select a desired book and the category lists can be printed for review and selection in creating your test template(s).

For now, if you click on the **“Select Template”** down arrow you will see the list of Generated Test Templates that are available to you. More than likely your initial list will be EMPTY since you have NOT created any templates yet, but later on you will see a list of templates.

Therefore, to get started we need to select **“Make New Template”**. This is where you would select the categories to generate a template. Below will be a sample of what the templates might look like.

Let us caution you now as to the NAMING pattern of Templates you generate so that you will more able to easily find your desired template later. You are limited in length (70 characters) so be descriptive and accurate about what you are creating. Possibly use the Book code (RR, DG, NG, SA or NP) followed by a few words describing the areas of concentrations for the template you create. The list will be displayed alphabetically. A sequence number such as RR Rule 1 to 9-Ver 1, RR Rule 1 to 9-Ver 2, etc. would be a good example. Be consistent in your naming of the Test Templates. You will find yourself spending less time searching for the template you want to create a test from.



Let's review how to use this new feature "Make New Template". Please click on the "Make New Template" button shown on the previous page, highlighted with a red oval, and the following screen will appear. The white text box in the middle are simply are just my notes to you.

### Test Template Generator

**New Template Name:**

**TOTAL QUESTIONS IN TEMPLATE:**  
0

Section	Rules of the Road	▼	
Category	Any	▼	}
Sub Category	Any	▼	
Sub Category	Any	▼	
Sub Category	Any	▼	
Total Possible Questions 1090		Add	<input type="text" value="1090"/> Add <input type="button" value="Remove"/>

In the cells above you will be required to select the Section (Book) from which you want to select categories. As mentioned, you can look at the "REPORTS" – "CATEGORY" – Book Selection from the Main Menu to get a better feel for your category choices. NOTE, you can select the Section and then jump down to the second Sub Category and select an item there leaving the Category and first Sub Category blank. This may benefit some users – you just have to play with it and see how it works. DON'T forget that once you create the template to enter a **NAME and click SAVE**. ANY edit changes you make to a template category or the count of questions requires that you **MUST** resave the template.

**NOTE, this feature has a LIMIT of no more than 100 questions being allowed to be generated in any test. Even if you select more than that, ONLY 100 questions will be generated on the test. This was done on purpose to prevent users from being able to create FULL copies of our LAPWARE database.**

IF you ever see the below screen pop-up just click on "RE-OPEN TEMPLATE MAKER" to continue.

LAPware Student

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LapWare Test Template Maker

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Please make sure you meet our minimum [Requirements](#) for using the template maker application.

The top diagram allows you to select the Section (Book) and then the Category and Sub Categories up to three levels deep, if provided, and the program will display the number of questions available for each level of category/sub category. You simply type in the number of questions desired and click "Add". When finished adding categories and the question count, enter the name of the file and click "Save". Basically, that's all there is to it, BUT there are other features you need to be aware of, such as filtering and deleting or correcting the count of the number of questions desired, so let's look at those features as well.



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The default display (as shown on the previous page) is **Rules of the Road** for the Section. If you click on the Section down arrow you will see the list of the other books available, as shown below. Let's select Safety and work on Stability math problems, as an example. Note that the **"Total Possible Questions"** available are shown in both the bottom left and middle of the screen. In the bottom middle are the NUMBER of questions you wish to have entered on your exam, right after the first **"Add"** statement. After entering the number desired here you click on the **"Add"** button and your selection will be added.

Section	Rules of the Road	}	Clear		
Category	Rules of the Road				
Sub Category	Deck General				
Sub Category	Navigation General				
Sub Category	Safety				
Sub Category	Navigation Problems				
Total Possible Questions 1090		Add	1090	Add	Remove

Select **"Safety"** and you will now see as shown below there are 5,254 questions in that book. These numbers are based upon the NMC database release as of 9/20/2013 and will change with future releases by the NMC.

Section	Safety	}	Clear		
Category	Any				
Sub Category	Any				
Sub Category	Any				
Sub Category	Any				
Total Possible Questions 5254		Add	5254	Add	Remove

Let's select the Category by scrolling down the list to find **"Principles of Stability"**. For the first Sub Category scroll down and select **"Stability and Trim Calculations"** as shown below. There are a total of 562 questions of the 5254 on stability available in the present database.

Section	Safety	}	Clear		
Category	Principles of Stability				
Sub Category	Stability and Trim Calculations				
Sub Category	Any				
Sub Category	Any				
Total Possible Questions 562		Add	562	Add	Remove

If you want, click on the second Sub Category and fine tune your Test Template. On the next page you will see the full list of **"Stability and Trim Calculations"** subcategories you can choose from.



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Let's create a simple template of 2 questions each from 5 different categories in Stability. I will simply create the template and it will be displayed on the bottom of the page below.

The second Sub Categories available for selection are listed here. Five were randomly selected with 2 questions from each entered on the template. A template name of "Stability Practice" should be entered. Click on "Save".

- Any
- Angle of Loll (GM)
- Change in Draft
- Compartment Standard
- Correction for List and Off-Center Weight
- Empirical Formula (Rolling Period)
- Final Draft
- Floodable Length Curves
- Free Surface Constants
- Free Surface Correction
- Initial Stability (KG / GM) Long Form
- List due to Negative GM
- Metacentric Height (GM)
- Parallel Sinkage
- Required GM
- Required GM (Tank Selection)
- Righting Arm Curves
- Shift of the Center of Gravity (GG')
- Solution for LCG-FP
- Time in Seconds
- Ton Per Inch Immersion
- Use of Tables
- Utilization of Trim Tables

Note that in the display below for the five categories selected, if you make a mistake with the selection or the number of questions and clicked on ADD, simply click on that line listed under the Categories below and then click on "Remove". Either go back and select your correct Sub Category or re-enter the correct number of questions desired and click on "Add" again. Your new selection will be added to the list. The sequence order does not matter.

**Test Template Generator**

New Template Name:

TOTAL QUESTIONS IN TEMPLATE: **10**

Section:

Category:

Sub Category:

Sub Category:

Sub Category:

Total Possible Questions 23    Add     Add    Remove

Categories	Questions
Safety, Principles of Stability, Stability and Trim Calculations, Ton Per Inch Immersion, Any	2
Safety, Principles of Stability, Stability and Trim Calculations, Shift of the Center of Gravity (GG'), Any	2
Safety, Principles of Stability, Stability and Trim Calculations, Metacentric Height (GM), Any	2
Safety, Principles of Stability, Stability and Trim Calculations, Final Draft, Any	2
Safety, Principles of Stability, Stability and Trim Calculations, Change in Draft, Any	2



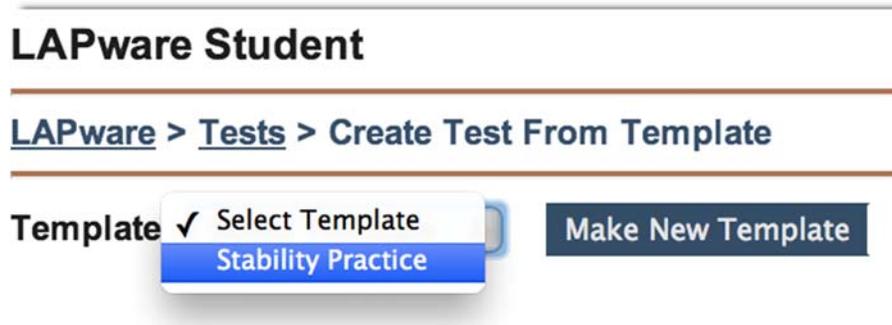
Upon selecting one of the items you will see at the bottom left of the screen the total number of available questions for that category. In the middle of the screen select the number of questions desired to have in your template, up to the maximum displayed, without exceeding 100, the limit of the questions that a test template will generate. Then click **“Add”**. Your selection is added to the list.

You will see that selection move down to the main box below your selection and you will have three options:

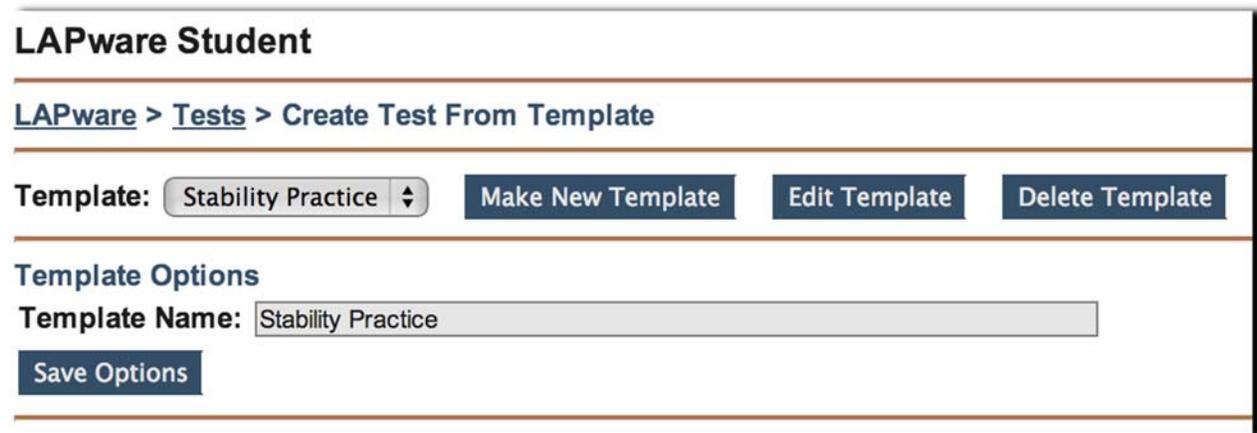
- 1) If this is the end of your test template, **enter the NAME** and click on **“Save”**.
- 2) If you made a mistake you can select the desired item in the list created and then click on **“Remove”**. Then make another selection or correct the one you selected and click on **“Add”**.
- 3) You can go back to the Section (YES – changing the book, if needed or desired), Category, Sub Categories and make more selections to add to your template.

**It is important to note that SOME NMC test modules DO PULL questions from different books!**

Upon finishing your selections, make sure you enter a NAME for your template. Let’ name this one **“Stability Practice”**. Click on **“Save”**. You will be returned to your main menu. This template you created will now appear under your template selection and will be visible by selecting **“Generate Template Test”**. A total list of YOUR created templates will be listed. Later you will see a more complete listing of your templates and administrator templates we generated for license exam test modules.



You can now select **“Stability Practice”** template to create a Test. Please do that. The screen below will appear along with a number of options for you to choose from.



This above diagram and the options available will be described on the next page.





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Locate the “**Generate New Test From Template**” portion on the previous screen (about one-fourth down the picture) and you will have the following choices to make.

**New Test Name:** Enter up to a 70 character name for the test. Remember to establish some consistent standard to naming your tests, as well as your templates. A sequence number is always beneficial even though the second test will overwrite the first test. If you print or save the test and answer sheet to your hard drive you will know which answer sheet goes with which test.

**Heading:** What you would like to appear at the top of the Test. A default title is possibly selected for you. Change it as desired – 32 character limit.

**Mode:** Test or Study Test. It is my personal opinion that as Students/Users/Mariners you should ALWAYS select **Study Test** which can be taken over and over and for which the feature of **REVIEW WRONG** will work so that you can home in on your weaknesses. Review Wrong will NOT work on a “**REAL TEST**”, which can only be taken once, graded and is final.

**Active:** “**Yes – Active**” allows the template to be seen by you on your default “**My Test**” screen and taken. **NOTE:** as soon as you take the test the first time you cannot go back and edit the test questions and select another question to replace it, or change the number of questions for a category. The test is **Non-Editable** and is locked in. “**No – Inactive**” allows you to review the questions on the test BEFORE making it active so that you know the proper questions are being selected by the template generator. My choice is to leave it as **No – Inactive** until I review the test questions. The template can be reselected later and its status of active changed to “**Yes**”.

**Set Test Period:** allows you to check the box and then enter a time within which the test must be completed.  
The **Start Date** and **End Date and Times**, presently set to Central Daylight Time or Central Standard Time, as noted, allows the test to only be displayed during the time frame as set. If the time as set is for a 3 hours, and a student opens the exam one hour before it reaches its END time, the student will only have ONE hour to complete the test. Once a timed test is started you cannot stop the clock even by exiting the program or shutting down the computer. After three hours the test will be graded for the questions answered and posted on your My Test screen. Depending upon whether you selected above a Test or Study Test you can or cannot retake the exam. The test score will be posted and cannot be changed for a REAL TEST, since it can only be taken once. If it were a Study Test, you have the option of re-taking the test or using the REVIEW WRONG feature to minimize your errors in question answers by re-answering the questions. I never use the Set Time Period but it does work. It can be used to post an exam to be available for you to take in a larger time frame such as on a full day.

At the bottom of the screen will be an overview of the categories selected and the number of questions that make up the Test Template. When a test is generated from this template, all questions will be randomly selected from the pool of questions available for each category. If a category only has 3 questions, for example, as based upon the NMC database of which **LAPWARE** has no control over, and



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you choose 2 questions from that category, expect to see 2 of the 3 questions on each exam generated. That is why we strongly recommend users do NOT first jump in and take tests but rather review all questions available using the **“Review Questions”** feature of **LAPWARE**.

As stated, the test generated will appear on your default **“My Test”** screen, as shown below. I cut off the additional tests that might exist and am showing the top of the list only. Each student’s screen will, of course, vary depending upon the tests they have created previously. Again, as a reminder, generating a second test from ANY template will automatically overwrite the first. **It is desirable and allowed for users to save that test and answer sheet by copying it to your hard drive or print it out for use later.**

ID	Name	Grade	Action	Time Remaining	Time Limit	Mode
#211282	Stability Practice	N/A	( Take Test   PDF   Answers   Delete )	--	--	Study Test

In the bottom brown bar you will see the **“ID #”** and test **“Name”**. To the right will be N/A which presently means that there is no score since you have not taken the test. This is where your grade will appear. You can click on **“Take Test”** and the following will appear.

ID	Name	Date	Mode
#211282	Stability Practice	05/01/2014	Study Test

[TAKE TEST](#)  
[VIEW RESULTS](#)

Please make sure you meet our minimum [Requirements](#) for using the testing application.

Click on **“Take Test”** noting that the Mode in the brown bar states that it is a **“Study Test”** which again means it can be taken multiple times and is allowed to use the **“WRONG ANSWER”** feature. The test questions will appear which we will not display here and you just answer the questions and submit the test for grading by clicking on **“End Test”**. That’s it for test taking a test from a template you created.

ID	Name	Grade	Action	Time Remaining	Time Limit	Mode
#211282	Stability Practice	0.00%	( Take Test   View Results   PDF   Answers   Delete )	--	--	Study Test

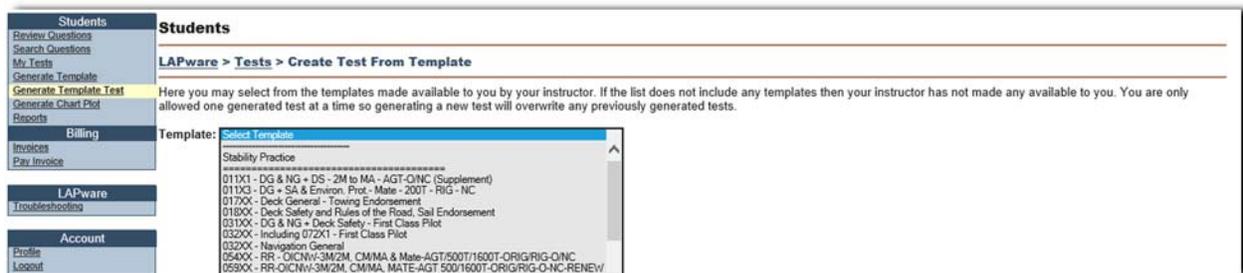


Upon taking the test and submitting it, which I did without answering any questions, you will see your grade displayed as shown above. Take Test is allowed ONLY if you created a STUDY TEST. Look at the logo at the end of this line and the TWO logos above on the right to see which logo goes with which test.

View Results allows you to VIEW the full test and see the answers you selected, makes available any diagrams, solutions or VIEW PDF references. For a real TEST you cannot change your answers BUT you can see an overview of your mistakes. BUT, for a Study Test you can select "Re-Take Wrong" and all correct answered questions will be cleared and ONLY those you got wrong will be displayed with answered cleared so you can re-answer them and improve your grade. This is allowed until you get a 100% score.

Looking further at the diagram above, you will see "PDF" and "Answers". These can be viewed, printed or saved to your hard drive and should be so done BEFORE generating a second test as this information will be overwritten. The "Delete" function simply deletes THIS TEST and not the Template from which the test was made.

A few final points that need to be discussed. When you select your "Generate Template Test" you will see a double dashed line across the screen (see the diagram below). YOUR templates generated will be ABOVE that double dashed line. The Test Modules we, as administrators, created, for sample license exams test modules, will be below the double dashed line. You can then select that template desired and create a new test.



Upon selecting your template, the following screen will be displayed. This is the SAME screen that you saw previously when you generated the Template. The advantages of seeing this screen again is that NOW you can select another template from the top "Template" list box or just leave it as the one already chosen. You can change the "Mode" from "Test" to "Study Test" (recommended) or set the "Timed Test" feature. At the bottom of the page is the "Click Here To Generate Test". I must point out again that if you click this button ("Click Here To Generate Test") it will overwrite any previous generated test and answer sheet.



<b>Students</b>	<b>Students</b>
<a href="#">Review Questions</a>	
<a href="#">Search Questions</a>	
<a href="#">My Tests</a>	
<a href="#">Generate Template</a>	
<a href="#">Generate Template Test</a>	
<a href="#">Generate Chart Plot</a>	
<a href="#">Reports</a>	
<b>Billing</b>	Template: <input type="text" value="Stability Practice"/>
<a href="#">Invoices</a>	
<a href="#">Pay Invoice</a>	
<b>LAPware</b>	<b>Generate New Test From Template</b>
<a href="#">Troubleshooting</a>	
<b>Account</b>	Mode: <input type="text" value="Test"/>
<a href="#">Profile</a>	Timed Test: <input type="checkbox"/> <input type="text" value="0"/> Mins.
<a href="#">Logout</a>	<ul style="list-style-type: none"> <li>• Test - A student test that students can only take once.</li> <li>• Study Test - A practice test that students can use to prepare for a Test.</li> <li>• A timer will countdown time from when you start the test.</li> <li>• Exiting the program will not pause the timer.</li> </ul>

Here you may select from the templates made available to you by your instructor. If the list does not include any templates then your instructor has not made any available to you. You are only allowed one generated test at a time so generating a new test will overwrite any previously generated tests.

The **MAXIMUM** number of questions randomly selected from your Generate Template Test feature, for any test generated by a student is 100 questions. Remember, the **SECOND** test and answer sheet will overwrite the **FIRST** test and answer sheet. If you wish to either save the previous test and/or answer sheet to your hard drive or printer, please do so before generating your next test **FROM ANY TEMPLATE YOU CREATED.**

Only **ONE** test from any number of Templates you create will be displayed on your "MY TEST" screen. It is highly recommended, therefore, that you study your Review Questions screen by **CATEGORIES** so that you can use **GENERATE TEMPLATE** feature to review what you have studied. You will find this process much more efficient in concentrating on your weak areas.

10 Total Questions

Question Filters	
#	Question Limit
1 Principles of Stability, Stability and Trim Calculations, Ton Per Inch Immersion, Any	2
2 Principles of Stability, Stability and Trim Calculations, Shift of the Center of Gravity (GG), Any	2
3 Principles of Stability, Stability and Trim Calculations, Metacentric Height (GM), Any	2
4 Principles of Stability, Stability and Trim Calculations, Final Draft, Any	2
5 Principles of Stability, Stability and Trim Calculations, Change in Draft, Any	2

[Click Here To Generate Test](#)

That's about it. It is simple and a very powerful tool added to **LAPWARE** for you to "Generate Template" and then "Generate Template Test" from your template(s) created.

The limits imposed of 100 questions and 1 test with answer sheet from any template at a time were decided by the authors to protect our work BUT to allow users the capability of homing in on areas of weaknesses. We hope you find this feature beneficial.

Regards,

Captain Joseph Murphy

Richard Plant