

命令模式

GMTMmt gmtmoment

Solves for the light ship weight and center of gravity at the current waterplane, such that $GMT \times \text{total weight} = \text{gmtmoment}$.

当前浮态下，求解空船重量和重心位置，使得 $\text{gmtmoment} = \text{横向 GM 值} \times \text{船舶总重}$ 。

GMTMmt

Displays the current GMT moment (screen only).

屏幕显示当前 GMT 重量矩。

参数说明

gmtmoment

The transverse GM multiplied by the total vessel weight. The gmtmoment is the slope of the plot of the inclining moments vs. the tangents of the heel angles from the stability test.

横向 GM 值乘以船舶总重，gmtmoment 是倾斜试验中重量移动力矩与横倾角正切值的比值。

Operation

操作

The given gmtmoment and the current waterplane (depth, trim and heel settings) are used to determine the light ship weight and center required for the vessel to be in total equilibrium and for its GM to equal the gmtmoment divided by total weight.

利用给定的 gmtmoment 和当前浮态（吃水，纵倾和横倾角）求解空船重量和处于平衡状态的重心位置。使得 GM 值为 gmtmoment 除以船舶总重。

This command works at any angle of heel and trim. Since gmtmoment is the product of an inclining experiment, it is useful for obtaining the as-inclined weight and center—particularly when substantial angles of trim or list complicate the calculation of VCG.

此命令适用于任何的横倾和纵倾角度。因为 gmtmoment 是由倾斜试验得到的，它可以用来求得倾斜后的重量和重心，特别是当存在一定的纵倾和横倾角时，使得计算 VCG 变得复杂。

The current state of the tanks and added weights is respected. The effect of any wave is included; but wind heeling/trimming moments are ignored.

计算考虑当前舱室装载和增加的重量。波浪的影响也会考虑，但是忽略风倾力矩的影响。

Display Output

显示输出

If the gmtmoment parameter is omitted, the current value of the GMT moment is displayed on the screen.

如果省略参数 gmtmoment，屏幕显示当前的 GMT 重量矩。

Nondisplay Output:

无显示输出

none.

无

Examples

样例

Determining the as-inclined weight and center of gravity:

计算倾斜后的重量和重心:

HEEL = 2.34 `List with inclining weights approx. centered.` 定义横倾, 包含移动重量

DRAFT = 14.72 @ 58A, 13.46@5.5A, 12.5 @ 47F `0.15 Hog; Mean P & S drafts.` `0.15m
中拱, 左右舷平均吃水

LOAD(FOWT1.S) = SNDG: 6.75 `Slack tanks ...` 装载带有自由液面的舱室

LOAD(FODB2.C) = SNDG: 0.08

ADD "INCLINING WEIGHTS" 1.25, 6.5A, 1.2P, 16.5 `Separate out the incl. wts` 增加移动重量

GMTMMT 1456 `Find "light ship" weight & CG.` 计算空船重量和重心位置

DELETE "INCLINING WEIGHTS" `Remove the inclining weights.` 删除移动重量

SOLVE `Find new waterline after removing weights.` 删除移动重量后, 求得新的水线位置

STATUS `Display the result.` 显示结果

Checking the current GMT moment:

查看当前 GMT 重量矩:

SOLVE

GMTMMT