

命令模式

VCG ["item"] vcg

Sets the total Fixed-Weight vertical center of gravity to the given value.

设置固体重量的垂向重心高度。

VCG ["item"] MAX [/NOTOL] [/HMAX:h] [/FSM | /TRUEFSM | /EXTRAFSM] [/NOFSA]

Sets VCG to the maximum VCG (requires previous use of the MAXVCG command).

Not available in BHS.

设定 VCG 为最大 VCG（要求前面已调用 MAXVCG 命令），不可在 BHS 中使用。

参数说明

vcg

The vertical coordinate, in current length units, of the Fixed-Weight center of gravity. If prefaced by an asterisk, the present value is incremented (or decremented).

固体重量重心在垂向方向上的数值。如果数值前加*号，表示根据当前的 VCG 增加或减少某数值。

item

The name of a weight item. (Must be enclosed in quotation marks.)

重物的名称（必须要以双引号引起）。

/NOTOL

Specifies that no extrapolation be allowed for maximum VCG data.

不允许推断最大许用 VCG

/HMAX: h

Specifies the maximum allowed heel angle with unfrozen tank loads present (default is 5°).

考虑当前未冻结舱室的装载，并设定最大允许的横倾角。（默认为 5°）

/FSM | /TRUEFSM | /EXTRAFSM

Temporarily increases the center of gravity by applying the specified Free Surface Moment (see the RA command where these parameters perform a similar function).

根据指定的自由液面修正方法临时增加重心高度。（参看 RA 命令，这些参数在其命令中作用的方式相同）

/NOFSA

Ignores Free Surface Adjustment when setting VCG to the maximum VCG.

当设定 VCG 为最大 VCG 时，忽略自由液面的影响。

Note: The Fixed Weight is the total vessel weight less the contents of tanks (but only those tanks which are being explicitly modeled).

注释：固体重量为整个船舶重量不包含舱室内装载的重量。（舱室指在模型中明确定义的舱室。）

VCG can also be set with the WEIGHT, SOLVE and GMTMMT commands.

VCG 可以和命令 WEIGHT, SOLVE, GMTMMT 连用

Operation

操作

If added weights are in existence (see the ADD command) then the center of gravity of the Light Ship is adjusted in order to achieve the total Fixed-Weight center of gravity.

如果已经有增加的重量（参看 ADD 命令），则空船重量的重心会调整以匹配整个船舶固体重量的重心位置。

When a specific weight item is named in the VCG command, the VCG of that item rather than the Light Ship is changed in order to make the total Fixed-Weight center of gravity equal the value specified.

在 VCG 命令中指定重量项目时，则被指定重量项目的 VCG 将被调整以匹配总固体重量的重心位置，而不是改变空船重量的 VCG。

The VCG of a specific weight item may be changed directly by means of the ADD command, using asterisks for quantities which remain the same; eg:

```
ADD "Weight X" * * * 2.34
```

可以通过 ADD 命令直接改变增加重量项目的 VCG, 用星号*代表保持不变的数据，例如：

```
ADD "Weight X" * * * 2.34
```

Maximum VCG

最大 VCG

The VCG of the Light Ship or any weight item may be set such that the total VCG is maximum using the command

设定空船重量或任何物体重量的 VCG 为最大 vcg，使得总的 VCG 为最大许用 VCG。

```
VCG "item" = MAX
```

where item is the name of the weight item (if omitted, the Light Ship is assumed). The /FSM, /TRUEFSM, or /EXTRAFSM parameter may also be used here to deduct the current formal or true free surface moment.

```
VCG "item" = MAX
```

Item 指重量项目的名称（如缺省，默认为空船重量）。参数 /FSM, /TRUEFSM, 或 /EXTRAFSM 可以用来模拟当前真实的自由液面影响。

The differences between the command "VCG = MAX" and the command "SOLVE MAXVCG" are: 1) The former cannot compute moments of transference in tanks but must resort to free surface moment adjustments; and 2) the former runs much more

quickly than the latter (not counting the time required to "prime" the system with the maximum VCG data).

命令 VCG = MAX 和 SOLVE MAXVCG 的区别是：1) 前者不能计算舱室内液体的移动力矩，只能借助于自由液面的修正。2) 前者比后者运行得快很多（不考虑系统之前准备最大许用 VCG 数据所用的时间）

Output:

输出:

none.

无

Example

样例

Adjusting the Light Ship VCG for a total Fixed-Weight VCG of 25.5:

调整空船重量 VCG 使得总固体重量的 VCG 为 25.5

VCG 25.5

Adjusting the Deck Cargo VCG for a total Fixed-Weight VCG of 15:

调整甲板货物的 VCG 使得总固体重量的 VCG 为 15

VCG "Deck Cargo" 15