

## 命令模式

DIVisions [(n)]tank[:li][:Uj],...[/WING:b1[,b2[,b3]]] [/HBHD:v1[,v2]] [/FWD: fwdend]  
 [/AFT: aftend] [/FLD: crtn] [/ENDTOL:t] [/NOCHECK]

Defines a division comprised of one or more tanks (or compartments) present in the model by assigning them a division number to be used in conjunction with the DAMSTAB command.

将模型中的一个或多个舱室定义为一个分舱区域并分配编号，与命令 DAMSTAB 连用。

DIVisions [(n)]

Displays one or all of the division assignments currently in effect.

显示当前有效的一个或所有分舱定义情况。

DIVisions [(n)] OFF

Removes one or all of the division assignments.

删除一个或所有分舱定义。

## 参数说明

(n)

The number to be assigned to the division. Must be an integer  $1 \leq n \leq 75$ .

分舱的编号，必须为 1（含）至 75（含）之间的整数。

tank [:li] [:Uj]

Name of a tank or compartment to be included in the division (may end in an asterisk to represent all tanks having the same beginning). Optional suffix :li assigns tank to the division's ith inboard layer; optional suffix :Uj assigns tank to the jth upper layer. These suffixes are usually not required since automatic assignment of tanks to layers is normally accurate. However, if it is found, for example, that an inboard layer is being flooded with the wing due to geometry which changes along the length of the division, the :li suffix may be used to override the automatic assignment.

分舱中包括舱室的名称（可以以\*结尾，表示所有开头相同的舱室）。可选后缀:li 表示指定舱室为分舱中的第 i 内层；可选后缀:Uj 表示指定舱室为分舱中的第 j 上层。由于自动的舱室层定义一般都是正确的，所以这些后缀通常是不需要注明的。然而，如果有必要，例如，如果某舷边因模型在此长度内形状改变使得内层被侵水，将需要使用后缀:li 重新进行定义。

/WING: b1 [,b2 [,b3[,b4[,b5[,b6]]]]]

Specifies the breadth of any wing tanks included in the division which may be damaged either independently of the inboard compartment(s) or in combination with them. The exact specification of how b1 is to be measured depends on the rule being applied in the DAMSTAB command. If multiple layers of inboard compartments are present, up to 6 breadth values may be given.

定义分舱中的边舱宽度，分舱中的边舱可以独立破损，也可以和内部舱室组合破损。如何量取 b1 的准确说明取决于命令 DAMSTAB 中所应用的规范。如果出现多个边舱层，则需要另外定义最多 6 层的 b 值。

/HBHD: v1 [,v2[,v3[,v4[,v5[,v6]]]]]

Specifies the height above baseline of any horizontal bulkhead or deck that is present above the waterline and is capable of limiting flooding when the damage does not penetrate it. If multiple levels of horizontal bulkheads are present, up to 6 height values may be given. DAMSTAB ignores portions of a tank above horizontal bulkheads when finding its most-outboard point.

定义水平舱壁或甲板在基线以上的高度值，该水平舱壁或甲板位于水线以上，并且当破损未将其穿透时，能够阻止侵水。如果出现多个水平舱壁高度，则需要定义多个（最多 6 个）高度值。当求解一个舱室的舷边最外侧的点时，DAMSTAB 会忽略该舱室在水平舱壁以上的部分。

/FWD: fwdend

Specifies the location of the nominal forward end of the division.

定义分舱的额定前止端位置。

/AFT: aftend

Specifies the location of the nominal after end of the division.

定义分舱的额定后止端位置。

/ENDTOL: t

Specifies the tolerance, in length units, by which the nominal ends of the division can vary from the actual ends.

指定分舱额定止端和实际止端在长度单位下的公差值。

/NOCHECK

Causes various error checking procedures to be bypassed when accepting the divisions definition.

当进行分舱定义时，不执行错误检查程序。

/FLD: crtn

Associates Critical Point number crtn with the division so when flooding is in effect there, that FLOOD or TIGHT point is ignored.

使关键点序号 crtn 与分舱关联，从而当该分舱发生侵水时，忽略关联的进水点和密性点。

## Operation

### 操作

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When considering a case of damage to one of the compartments in a vessel, it is often necessary to assume that the damage ruptures one or more tanks within the compartment, but not other tanks which are far enough away from the assumed point of penetration that they escape being damaged. There may also be longitudinal bulkheads which could either be left intact or penetrated. Thus, for the purposes of analyzing a case of damage, more than one of the tank/compartment parts in the vessel model could well be involved. The purpose of the DIVISIONS command is to assign an identifying number to such a collection of tank parts so that the division can be conveniently referenced by other commands.

当考虑船舶的一种破损情况时，通常需要假设一个或多个舱室破损，而距离破损点足够远的其他舱室则认为是完好的。纵向舱壁则有可能是完整的，也有可能破损。因此，为了计算一种破损情况，需要对模型中的多个舱室进行考虑。DIVISIONS 命令的目的是把一组舱室分配一个编号，从而可以在其他命令中方便的调用这个分舱编号。

The tank list must contain one or more names of tank parts which are assigned to the given division number n. If the (n) parameter is omitted, then the next unassigned division number is used.

舱室列表必须包含一个或多个舱室名，用来指定给分舱编号 n。如果忽略了参数(n)，则将使用下一个未指定的分舱编号。

Nominal "end" locations are assigned to each division. This is valuable information for the purpose of checking and verifying that each division has been properly constructed. It is also essential information for the application of rules such as those which compute the probability of damage. Where a division ends with a plain transverse bulkhead, the nominal end is the same as the actual end, and no difficulty exists. However, if the bulkhead is of a more complex arrangement such that adjacent divisions actually overlap to some degree, the assignment of the nominal end becomes a correspondingly complex process, and it will usually differ from the actual extreme end location. The automatic process attempts to locate the nominal end at the point on the division bulkhead which is closest to the middle of the division.

每组分舱都需要指定其额定“端点”位置。这可用于核对每组分舱是否构建恰当，同时也是校核规范所需的必要信息，例如计算破损概率。当分舱止端为平面横舱壁时，额定止端和实际止端相同，并且没有公差。然而，如果舱壁是复杂的布置，例如邻近的分舱有不同程度的重合，使得分配分舱的额定止端位置因此变得复杂，而且通常和分舱的实际止端位置不同。自动定义会把分舱的额定止端位置设在舱壁上最接近中间位置处。

The /FWD and /AFT parameters allow the user to override this automatic end assignment with particular locations. However, locations so supplied are not allowed to differ from the computed ends by more than 25% of the actual extreme division length. The 25% limit is set to prevent gross errors and requires the user to specify exceptions. Where required, the nominal ends can be set as desired by using the /ENDTOL or /NOCHECK parameters.

参数/FWD 和 /AFT 允许用户重新定义分舱止端为指定位置。然而，自定义的位置与计算的位置的差值不能超过分舱实际最大长度的 25%。这 25%的限制是为了防止出现严重错误，同时也允许用户指明特殊情况。如果需要，额定止端可以通过参数/ENDTOL 或/NOCHECK 设置为所需数值。

The /ENDTOL parameter allows you to specify the tolerance by which the nominal ends of the tank can vary from the actual ends. The /NOCHECK parameter circumvents all checks on the DIVISION definition. It can be used for complex tank arrangements but must be used with caution as there are no checks as to the shape of the division. When the /ENDTOL and /NOCHECK parameters are used, the /FWD and /AFT parameters must also be used.

参数/ENDTOL 允许用户定义分舱额定止端和实际止端的公差值。参数/NOCHECK 则禁止执行所有 DIVISION 定义中的检验过程。这可被用在复杂的舱室布置中，但使用时必须注意的是，分舱外形也是没有任何检验的。当使用参数/ENDTOL 和/NOCHECK 时，必须同时使用参数/FWD 和/AFT。

Any tanks whose names are listed with a "+" prefix are considered flooded whenever the tank listed immediately prior to them is flooded - even if entirely beyond the ends of the division. This is useful for including tanks which would be flooded indirectly by the damage (progressive flooding).

每当舱室发生侵水时，紧列在其后的并且有"+"前缀的舱室也认为是侵水的，即使此舱室整个都在分舱止端之外。这对指定由于破损而间接进水的舱室非常有用（累进进水）。

If the DIVISIONS command is issued with no parameters, then a display of the present division assignments is shown.

如果没有引用任何参数，运行命令 DIVISIONS 则显示当前分舱情况。

The DIVISIONS OFF command causes the present division assignments to be voided so that all division numbers become unassigned.

命令 DIVISIONS OFF 使当前分舱指定为空，从而所有分舱编号成为未分配状态。

### Display Output

#### 显示输出

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Without parameters, the DIVISION command produces a table showing the locations of the forward and aft ends of the division. Also shown are any values of b and v which were given when the division was defined, any associated Critical Point number, and the names of all parts comprising each division.

没有其他参数的情况下，命令 DIVISION 生成一个显示每个分舱首尾止端位置的表格。还会显示分舱定义时指定的所有 b 和 v 值，以及所关联的关键点序号和组成每个分舱的所有子模型的名称。

### Nondisplay Output

#### 非显示输出

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none.

无

### Example

#### 样例

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Defining new divisions and displaying the division assignments:

定义新的分舱并且显示分舱构成：

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DIVISIONS OFF
DIVISION(1) FORPK.C
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DIVISION(2) CMPT2.S

DIVISION(3) CMPT3.C,CMPT3U.C /HBHD: 45.

DIVISION(4) CMPT4.S,CMPT4I.S /WING: 15.

DIVISION(5) CMPT5.S,CMPT5U.C,CMPT5I.S /WING: 15. /HBHD: 45.

DIVISION(6) ENGRM.C /AFT:5 /FWD:3.5 /ENDTOL:40

DIVISION(7) AFTP.K.C /AFT:1 /FWD:8 /NOCHECK

DIVISIONS