# 命令模式

### STABility [@] LOad [(tanklist)] [loadlist] /GMT

Computes and displays GMT as a function of tank loading (requires the AF module).

计算并显示舱室装载下的横向 GM 值(需要 AF 模块)。

#### STABility crt [options]

Overwrites current limits and produces a stability report for the given three-letter criterion code and any given options (requires the AF module).

覆盖现有衡准条件并为给定的三个字母标准代码和任何给定选项生成稳定报告(需要 AF 模块)。

#### STABility SETUP

Opens a template which presents all the stability criteria that can be addressed through the STABILITY command. The template provides buttons to set the options for each criteria and to generate a stability report for the current condition.

打开一个模板,其中显示了可通过 STABILITY 命令解决的所有稳性衡准条件。该模板提供了用于设置每个衡准条件的选项以及为当前衡准条件生成稳性报告的按钮。

#### STABility crit SETUP [ALL]

Provides the correct syntax for a STAB crit options command enabling configured criteria to be efficiently used in a run file. The options dialog for the given criterion appears on the screen, followed by an Edit session showing the STABILITY parameters for the selected options, which can easily be copied to a run file. If ALL is present, parameters are included for all options, not only those that have been changed; otherwise, only those that differ from the defaults are shown.

为 STAB 衡准选项命令提供正确的语法,使配置的衡准条件能够在运行文件中有效使用。给定条件的选项对话框出现在屏幕上,然后是显示所选选项的 STABILITY 参数的编辑会话,这些参数可以很容易地复制到运行文件中。如果存在 ALL,则包含所有选项的参数,而不仅仅是已更改的选项;否则,仅显示与默认值不同的那些。

#### STABility AHEET [ON | OFF]

Turns the Stability Sheet mode on or off (applies only to STAB crit, not STAB /GMT). When it is ON, a compact presentation of the loading condition and the stability result is produced instead of the usual report format (requires the CG module along with the AF module).

打开或关闭稳性表模式(仅适用于 STAB 衡准,不适用于 STAB /GMT)。当它打开时,将生成装载工况和稳性结果的紧凑表示,而不是通常的报告格式(需要 CG 模块和 AF 模块)。

# 参数说明

# (tanklist)

List of tank names enclosed in parentheses. Must be the first parameter after LOAD if used.

舱室名称,被括号括起。如果使用此参数,此参数必须是 LOAD 后的第一个参数。

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#### loadlist

Load fractions; eg. 0.1 0.2 ... 1.0

分数表示的舱室装载。

#### /GMT

This slash parameter is required.

此斜线参数是需要的。

#### crit

The three-letter code representing one of the available stability criteria; use STAB SETUP for a list of available codes and criteria.

代表可用稳性衡准之一的三个字母代码;使用"STAB SETUP"获取可用代码和条件的列表。

### options

The slash parameters that specify options for a particular criterion; use STAB crit SETUP for a list of options for each crit.

指定特定条件选项的斜杠参数;使用 STAB 衡准设置为每个衡准的选项列表。

### **Operation**

# 操作

For the STABILITY LOAD /GMT form, certain tanks receive a series of loads as specified in the load list. The tanks are those named by tanklist or, if no such list is given, the default tank selection is used (see the TANK command). If there is no default tank selection and no tank list is given, all tanks are assumed. Any tanks not involved in the loading changes keep their present loads.

对于稳定性载荷/GMT形式,为舱室列表中的舱室赋予装载。如果没有舱室列表,默认为当前舱室(查看命令 TANK)。如果没有默认的舱室或舱室列表,默认选中全部的舱室。在装载变化中没有涉及的舱室保持当前的装载不变。

For each load, complete equilibrium is found (depth, trim and heel) regardless of whether any of these variables are "fixed". After each equilibrium is found, a line of data is displayed showing depth, trim and heel along with BG, BM and GM.

对每一装载工况,无论变量(吃水,纵倾和横倾)是否被锁定都要找到平衡点。找到平衡点后,一行数据会显示吃水,纵倾和横倾,还有BG(重心高度),BM(稳心高度)和GM。

Executing the STABILITY command does not permanently change either the type of the tank (see the TYPE command) or its load setting.

运行 STABILITY 命令不会永久的改变舱室的类型或装载设置(查看命令 TYPE).

Levels of loading may be specified by load fractions. See the TC command for a discussion of load fractions. If loadlist is omitted, the default fraction list is used, which is 0.05, 0.1, 0.2, ..., 0.9, 0.95, 0.98, 1.0.

可以通过设定装载百分数来定义舱室装载。查看命令 TC 了解对装载百分数的介绍。如果省略了载荷列表,会使用默认的装载分数为 0.05, 0.1, 0.2, ..., 0.9, 0.95, 0.98, 1.0.

STABILITY crit SETUP translates the selected options and returns the correct syntax for the STAB crit options that reflect the complete criteria. The syntax can be copied into a run file in place of the typical LIMIT and RAH command sequence.

稳性衡准安装程序的所有选项,并为反映完整条件的 STAB 衡准选项返回正确的语法。可以将语法复制到运行文件中,以代替典型的 LIMIT 和 RAH 命令序列.

STABILITY crit automatically formulates whatever Limits are appropriate for the given criterion and produces a complete report that in most cases includes one or more righting-arm curves.

稳性衡准会自动制定适合给定标准的任何极限,并生成一份完整的报告,在大多数情况下包括一个或多个右复原力臂曲线。.

Stability criteria options selected in STAB SETUP templates are stored in a file called Criter2Options.sav. If this file exists in the working directory when the STAB SETUP command begins, the saved choices will be restored.

在 STAB SETUP 模板中选择的稳性衡准选项存储在名为 Criter2Options.sav 的文件中。如果 STAB SETUP 命令开始时工作目录中存在此文件,则将恢复保存的选项。

PLEASE NOTE: Since some variation of interpretation is involved in the application of all stability criteria, optional parameters are made available. For criteria issued by egulatory agencies, the user is expected to be familiar with the published documentation in order to: 1) select the appropriate options; and 2) verify that the implementation provided through the STABILITY command truly represents the user's own interpretation of the criterion as it applies to the subject vessel.

请注意:由于在所有稳性衡准的应用中涉及一些解释变化,因此提供了可选参数。对于海事监管机构发布的标准,用户应熟悉已发布的文档,以便:1)选择适当的选项;2)验证通过 STABILITY 命令提供的实现是否真正代表了用户自己对适用于船舶稳性衡准的解释。

# **Display Output**

# 显示输出

STABILITY LOAD /GMT output table begins at the left with depth, trim and heel. Origin depth is used rather than draft since it is well defined at any heel and trim. These are followed by displacement weight.

STABILITY LOAD /GMT 输出表格从左边深度,纵倾和横倾开始。因为在任何纵倾和横倾下可以方便的定义原点深度,所以使用原点深度而不是吃水。这些显示在排水量后面。

Next is shown the tank loading parameter, which is the independent variable. To its right appear BG, BM0, BM and finally GM. BM0 is BM with the tank free surfaces (of all intact tanks) excluded. GM is simply the difference between BM and BG.

接着显示舱室载荷参数,这些是自由变量。在它的右侧显示 BG, BMO, BM 和 GM. BMO 是不考虑舱室自由液面(完整舱室)的 BM 值。GM 值时 BM(稳心高度)和 BG(重心高度)的差值。

The format of the STABILITY crit report varies according to the requirements of the criterion and the options chosen. When STAB SHEET if OFF, the report makes use of standard GHS reports. When STAB SHEET is ON, a compact graphical form of the report is produced that in most cases fits on one page.

稳性报告的格式根据标准的要求和选择的选项而有所不同。当"列表开启"如果为"关闭"时,报告将使用标准 GHS 报告。当 STAB SHEET 处于打开状态时,将生成报表的紧凑图形形式,在大多数情况下,该形式适合一页。

# **Nondisplay Output**

# 非显示输出

The STAB LOAD /GMT nondisplay output table is preceded by the current values of fixed weight and center of gravity. The name of the tank(s) involved is also shown. A table is then defined which consists of the same entries in the same order as found in the displayed table. Units are the same as in the display output.

STAB LOAD /GMT 非显示输出表格会显示当前固体重量和重心位置,也会显示所涉及到的舱室的名称。该表的表列和顺序与显示输出相同。单位和输出显示中相同。

STABILITY crit reports appear on the screen if no report file is open. In the STAB SHEET ON mode, a pop-up window displays the compact stability sheet.

如果没有打开报告文件,屏幕上会出现稳性报告。在"列表开启"模式下,弹出窗口显示紧凑稳性计算表。

# **Example:**

#### 样例

To compute transverse metacentric stability as a function of tank loading:

计算舱室装载下的横向初稳性:

STABILITY @ LOAD (BAL\*) 0.1 0.2 ... 0.7 0.75 ... 0.95 /GMT

To see a list of available criteria and optionaly configure or run a criteria:

查看可用衡准列表以及可选配置或运行条件:

### STABILITY SETUP

To evaluate the current condition against the IMO severe wind and rolling criteria using the default options (using the SWR code shown in STAB SETUP):

要使用默认选项(使用 STAB SETUP 中显示的 SWR 规则)根据 IMO 强风和横摇标准评估当前条件:

#### STABILITY SWR

To configure the options for the IMO SWR criteria and view the command syntax which can be copied into a run file:

要配置 IMO SWR 条件的选项并查看可复制到运行文件中的命令语法,请执行以下操作:

# STABILITY SWR SETUP

To run the IMO SWR criteria in a run file using the default options but checking stability to port and starboard:

要使用默认选项在运行文件中运行 IMO SWR 衡准,但检查左舷和右舷的稳性:

STABILITY SWR /AngBoth: 1