# 目视停靠引导系统飞行员指南

# Pilot instructions for Visual Docking Guidance System

#### 1. START-OF-DOCKING 启动停靠系统

When the system is started, 'WAIT' will be displayed. 系统启动后,显示"WAIT (等待)"。



#### 2. CAPTURE 捕获

The floating arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft.

闪动的箭头表明系统已被激活且处于捕获模式,对靠近的 机型进行检测。

It shall be checked that the correct aircraft type is displayed. The LEAD-IN line shall be followed.

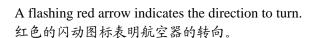
检查航空器类型是否正确。跟随引导线滑行。



# 3. TRACKING 跟踪

When the aircraft has been caught by the laser, the floating arrow is replaced by the yellow centre line indicator.

航空器被激光扫描仪捕获后,闪动箭头将被如图所示黄色中心线(停泊进度条)代替。



The vertical yellow arrow shows position in relation to the centre line. This indicator gives correct position and azimuth guidance.

垂直的黄色箭头表示航空器距中轴线的位置。这个指示器指出航空器的正确位置并进行方位引导。



### 4. CLOSING RATE 停泊进度

Display of digital countdown will start when the aircraft is 30 meters from stop position.

航空器距泊位30米后,开始出现距离倒计数信息。

When the aircraft is less than 12 meters from the stop position, the closing rate is indicated by turning off one row of the centre line symbol per 0.5 metres, covered by the aircraft. Thus, when the last row is turned off, 0.5 metres remains to stop.

当航空器距停泊位 12 米时,停泊进度条将逐行关闭,每关闭一行相当于航空器前进 0.5 米。当最后一行关闭时,到停止位置只剩 0.5 米。



# 5. ALIGNED TO CENTRE 对准中线

The aircraft is 8 meters from the stop position. The absence of any direction arrow indicates an aircraft on the centre line. 如图,航空器距停止位置 8 米时,如果不显示任何方向箭头则表明航空器处于中轴线上。



#### 6. SLOW DOWN 减速

If the aircraft is approaching faster than the accepted speed, the system will show 'SLOW DOWN' as a warning to the pilot. 如果航空器的速度超过系统设定的限制速度,系统将向飞行员显示"SLOW DOWN"警告。



## 7. AZIMUTH GUIDANCE 方位引导

The aircraft is 4 meters from the stop-position. The yellow arrow indicates an aircraft to the right of the centre line, and the red flashing arrow indicates the direction to turn.

如图, 航空器距泊位 4 米。黄色箭头表明航空器偏到了中轴线的右边, 红色箭头指出了航空器应转的方向。



#### 8. STOP POSITION REACHED 到达停止位

When the correct stop-position is reached, the display will show 'STOP' and red lights will be lit.

当航空器到达正确的泊位位置时,显示器将显示"STOP"和如图所示的红色方块图标。



### 9. DOCKING COMPLETED 停泊结束

When the aircraft has parked, 'OK' will be displayed. 当停泊过程结束时,将显示"OK"。



## 10. OVERSHOOT 越过泊位

If the aircraft has overshot the stop-position, 'TOO FAR' will be displayed.

如果航空器滑动超出了泊位,将显示"TOO FAR"。



### 11. WAIT 等待

If some object is blocking the view toward the approaching aircraft or the detected aircraft is lost during docking close to STOP, the display will show 'WAIT'.

靠近停止位时,如果某些物体阻挡了系统对行进航空器的观察,或者丢失了已检测到的航空器,显示屏显示等待"WAIT"。

The docking will continue as soon as the blocking object has disappeared or the system detects the aircraft again.

如果阻挡物体消失后或者系统检测到航空器,停泊过程将继续。

The pilot must not proceed beyond the bridge, unless the 'WAIT' message has been superseded by the closing rate bar. 飞行员不能继续滑行,直到"WAIT" 消息被停泊进度条代替。



The display will show 'SLOW' when the DGS lose the aircraft very near the STOP position or visibility for DGS is reduced. 当停靠引导系统在停止位置附近丢失被引导的航空器或能见度降低时,显示屏显示"SLOW"。

The pilot must not proceed beyond the bridge, unless the closing-rate bar is shown.

航空器应停止滑行, 直到显示进度条。





# 13. AIRCRAFT VERIFICATION FAILURE 航空器验证 失败

During entry into the stand, the aircraft geometry is being checked. If, for any reason, aircraft verification is not made 12 meters before the stop-position, the display will first show 'WAIT' and make a second verification check. If this fails 'STOP' and 'ID FAIL' will be displayed. The text will be alternating on the upper two rows of the display.

在航空器进入泊位的期间,系统将检测航空器的几何形状。如果由于某些原因在距离停止位置 12 米前没能完成航空器验证,显示器显示"WAIT",并进行第二次检测。如果这次仍然失败,则 显示"STOP" 和"ID FAIL"。该文本将分成上下两行显示。

The pilot must not proceed beyond the bridge without manual guidance, unless the wait message has been superseded by the closing rate bar.

没有人工引导, 航空器不能继续滑行, 除非显示停泊进度条。



If an object is found blocking the view from the DGS to the planned stop position for the aircraft, the docking procedure will be halted with a 'WAIT' and 'GATE BLOCK' message. The docking procedure will resume as soon as the blocking object has been removed.

如果停靠引导系统和航空器预定停泊位置之间的视阈被某些物体阻挡,则停泊程序将被终止,同时显示"WAIT"和"GATE BLOCK"信息。一旦移除阻挡物体,停泊程序也将恢复。

The pilot must not proceed beyond the bridge without manual guidance, unless the 'WAIT' message has been superseded by the closing rate bar.

没有人工引导,飞行员不能继续滑行,除非"WAIT" 信息被停泊进度条取代。













#### 15. VIEW BLOCKED 观测被阻挡

If the view towards the approaching aircraft is hindered, for instance by dirt on the window, the DGS will report a view blocked condition. Once the system is able to see the aircraft through the dirt, the message will be replaced with a closing rate display.

如果系统对行进航空器的观察受到阻碍,例如窗口上的污垢所致,系统将报告此状况。一旦系统能够看到航空器,则显示停泊进度条。

The pilot must not proceed beyond the bridge without manual guidance, unless the 'WAIT' message has been superseded by the closing rate bar.

未经人工引导,航空器不能继续滑行,除非"WAIT"信息被停泊进度条取代。



Any unrecoverable error during the docking procedure will generate an 'SBU (safety back-up)' condition. The display will show red stop bar and the text 'STOP', 'SBU'.

在停泊过程中的任何不可恢复性错误将导致系统显示 SBU(安全备份)信息。显示器将显示红色的停止条和文字 "STOP"、"SBU"。

A manual backup procedure must be used for docking guidance.

必须提供人工引导。











#### 17. TOO FAST 太快

If the aircraft approaches with a speed higher than the docking system can handle, the message 'STOP (with red squares)' and 'TOO FAST' will be displayed.

如果航空器的速度超过了系统可以处理的范围,将显示 "STOP(带红色的方格)"和 "TOO FAST"信息。

The docking system must be re-started or the docking procedure completed by manual guidance.

必须重新启动停靠系统或者利用人工引导完成停靠过程。







#### 18. EMERGENCY STOP 紧急停止

When the Emergency 'Stop' button is pressed, STOP is displayed.

当按下紧急停止按钮时,显示"STOP"。



# 19. CHOCKS ON 上轮机挡

'CHOCK ON' will be displayed, when the ground staff has put the chocks in front of the nose wheel and pressed the 'Chocks On' button on the Operator Panel.

当地面人员在前轮放上挡物并在操作员面板按"Chocks On" 时,指示器将显示 "CHOCK ON"。



#### 20. ERROR 错误

If a system error occurs, the message 'ERROR' is displayed with an error code. The code is used for maintenance purposes. 如果系统发生错误,将显示"ERROR"及错误代码,该代码用于维护目的。



# 21. SYSTEM BREAKDOWN 系统崩溃

In case of a severe system failure, the display will go black, except for a red stop indicator. A manual backup procedure must be used for docking guidance.

如果遇到严重的系统故障,显示器将变黑,并显示红色的停止信息。这时必须提供人工引导。



#### 22. POWER FAILURE 电源失效

In case of a power failure, the display will be completely black. A manual backup procedure must be used for docking guidance.

如果遇到电力中断,显示器将完全变黑。这时必须提供人工引导。

