

**OPERATION, APPENDIX A  
USER GUIDE - PILOTS, SAFEDOCK 3-9  
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**1. SAFETY PROCEDURES****1.1 GENERAL WARNING**

The DGS System has a built-in error detection program to inform the aircraft pilot of impending dangers during the docking procedure.

IF THE PILOT IS UNSURE OF THE INFORMATION, BEING SHOWN ON THE DGS DISPLAY UNIT, HE MUST IMMEDIATE STOP THE AIRCRAFT AND OBTAIN FURTHER INFORMATION FOR CLEARANCE.

**1.2 ITEMS TO CHECK BEFORE ENTERING THE STAND AREA**

WARNING: THE PILOT SHALL NOT ENTER THE STAND AREA, UNLESS THE DOCKING SYSTEM FIRST IS SHOWING THE VERTICAL RUNNING ARROWS. THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THESE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.

WARNING: THE PILOT SHALL NOT ENTER THE STAND AREA, UNLESS THE AIRCRAFT TYPE DISPLAYED IS EQUAL TO THE APPROACHING AIRCRAFT. THE CORRECTNESS OF OTHER INFORMATION, SUCH AS 'DOOR 2', SHALL ALSO BE CHECKED.

**1.3 THE SBU MESSAGE**

The message STOP SBU means that docking has been interrupted and has to be resumed only by manual guidance. DO NOT TRY TO RESUME DOCKING WITHOUT MANUAL GUIDANCE.

**2. START-OF-DOCKING**

The system is started by pressing one of the aircraft type buttons on the Operator Panel. When the button has been pressed, WAIT will be displayed.



**3. CAPTURE**

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

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

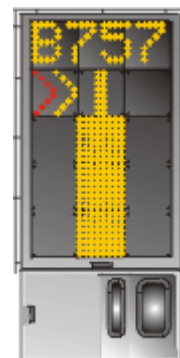
THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE ARROWS HAVE BEEN SUPERSEDED BY THE CLOSING RATE BAR.

**4. TRACKING**

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

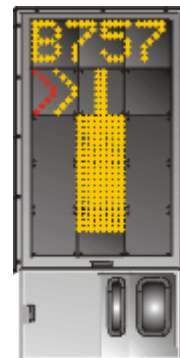
A flashing red arrow indicates the direction to turn.

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

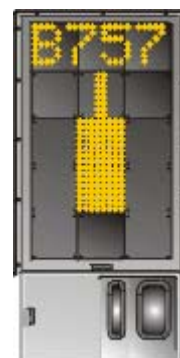
**5. CLOSING RATE**

When the aircraft is less than 12 meter from the stop position, the closing rate is indicated by turning off one row of the centre line symbol per half a metre of the distance, covered by the aircraft toward the stop position of the stand.

The picture illustrates the aircraft ten metres from stop position, slightly left of the centre line. The red arrow indicates the direction to steer.

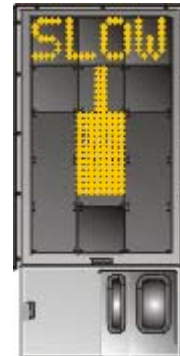
**6. ALIGNED TO CENTRE**

The aircraft is eight meters from the stop position. The absence of any direction arrow indicates an aircraft on the centre line.



**7. SLOW DOWN**

If the aircraft is approaching faster than the accepted speed, the system will show SLOW DOWN as a warning to the pilot.

**8. AZIMUTH GUIDANCE**

The aircraft is four 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.

**9. STOP POSITION REACHED**

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



**10. DOCKING COMPLETED**

When the aircraft has parked, OK will be displayed.



**11. OVERSHOOT**

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



**12. CHOCKS ON**

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.



**13. WAIT**

If some object is blocking the view toward the approaching aircraft or the detected aircraft is lost during docking, before 12 meters to STOP, the display will show WAIT. The docking will continue as soon as the blocking object has disappeared or the system detects the aircraft again.

As the aircraft is approaching the stop position, the aircraft geometry is being checked. If, for any reason, aircraft verification is not made 12 meters before the stop-position, the display will show WAIT, STOP and ID FAIL. The text will be alternating on the upper two rows of the display.

THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE "WAIT" MESSAGE HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.



**14. BAD WEATHER CONDITION**

During heavy fog, rain or snow, the visibility for the docking system can be reduced.

When the system is activated and in capture mode, the display will deactivate the floating arrows and show 'DOWN GRADE'.

This message will be superseded by the closing rate bar, as soon as the system detects the approaching aircraft.

THE PILOT MUST NOT PROCEED BEYOND THE BRIDGE, UNLESS THE "DOWN GRADE" TEXT HAS BEEN SUPERSEDED BY THE CLOSING RATE BAR.

