## SAFEDOCK VISUAL DOCKING GUIDANCE SYSTEM (VDGS) AT TAN SON NHAT INTL AIRPORT

## 1. INTRODUCTION

Operational procedure of the Visual Docking Guidance System (VDGS) at Tan Son Nhat Intl Airport.

## 2. DESCRIPTION OF SYSTEM

VDGS provides both pilots with guidance for maneuvering the aircraft into the gate to the correct centerline and stop-position under all operational conditions.

A single cabinet houses a number of units: display (including LEDs), a laser scanner, control and power units and it is installed at the fixed gates in terminals of the airport.

VDGS at Tan Son Nhat Intl airport is Safedock type T3-9 (T-types), available at stands from 9 to 22.

Pilots are requested to comply with limitations of speed during entry into stand using VDGS as follows:



Distance trom stop-position ot stand:	<b>1</b> 0-3m	20-10m	20m or greater
Taxi speed of aircraft:	2m/s	3m/s	4m/s
Max distance between the center of the nose wheel of aircraft and the center of the stop			

line of aircraft stand:
- stands 9-18: +1m (after the stop line of aircraft stand) and -0.5m (before the stop line of aircraft stand)

- stands 19-22:  $\pm$ 0.6m (after the stop line of aircraft stand) and -0.5m (before the stop line of aircraft stand)

• Within remaining distance, reduce speed and stop at stop-position of stand.

The unit is mounted 4-8m above ground and provides multiple functionality. For example, clear pilot instructions, accurate aircraft identification and tracking, as well as quick and easy access to this low maintenance unit.

## 3. SAFETY PROCEDURE

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

WARNING: If the pilot is unsure of the information being shown on the Safedock Display Unit, he must immediately stop the aircraft and obtain further information for clearance.

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 The pilot must not proceed beyond the bridge, unless these arrows have been superseded by the closing rate bar.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 accuracy of other information, such as "DOOR 2" shall also be checked.

The message  $^{\prime\prime}$ STOP SBU $^{\prime\prime}$  means that docking has been interrupted and has to be resumed only by manual guidance.

