

Supercedes: 2019-D-003

Directive: 2019-D-007

Subject: Mandatory use of the new Advanced Visual Docking Guidance System (A-VDGS) on all A-VDGS equipped Stands

From: Aviation Services

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Date of Issue: August 19, 2019

**Expected Action**: Operators are required to brief appropriate staff on this Directive and to ensure compliance.

**Background and Impact**: Toronto Pearson has a number of complex aircraft parking stands. Serious problems have arisen when aircraft have taxied onto a stand or have been towed onto the stand, incorrectly. The Advanced Visual Guidance Docking System (A-VDGS) system is designed to prevent this from happening. Therefore, <u>operators (including air</u> <u>crew, ground, and tow crews) are required to use the A-VDGS when taxiing or towing an</u> <u>aircraft onto an A-VDGS equipped stand</u>. All aircraft tows onto A-VDGS equipped stands shall utilize the "TOW-ON" feature.

A list of A-VDGS-equipped stands is provided in Table 1 (below).

The A-VDGS now operates on the ADB SAFEGATE SafeControl Apron Management (SAM) operating system, which is more sophisticated than the legacy system it replaced. The safety logic defined in SAM is based on the aircraft gate mix and it will not allow an aircraft to dock, if there is an adjacency restriction. However, in order for the A-VDGS to provide this protection (both to the aircraft taxing or under tow and to aircraft parked on adjacent Stands), the system has to be used by all operators and whenever an aircraft is taxiing or being towed onto a Stand. Hence, the use of A-VDGS is a mandatory requirement.

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### Emergency Stop or Dead Man Switch Activation

If the A-VDGS Emergency Stop or Deadman switch is activated on a stand, the adjacency restriction control feature will be interrupted. It is very important, therefore, that whenever an operator activates either the Emergency Stop button or Dead Man switch, they reset the A-VDGS unit to normal operation, as soon as practicable thereafter.

#### Unserviceable A-VDGS Units

If an A-VDGS unit is found unserviceable, it should be reported immediately to the Airport Operations Control at (416) 776-3055. An unserviceable A-VDGS unit will then be tagged as out of service by GTAA Maintenance. The stand may still be used. However, crews will have to refer to the placards and adjacency restrictions therein and follow all safety procedures when executing an aircraft arrival or tow.

## Table 1. List of A-VDGS Equipped Stands

The new A-VDGS units are operational on the following Stands.

# <u>Terminal 1</u>

	120/120A	134	142	160	167A/167B	175/175A	193/193A
	122	135	143/143A	161	168A/168B	176	
	124	136	144	162	169A/169B	177	
	126	137	145/145A	163	170/170A	178	
	128	138/138A	151	164A/164B	171	179	
	131	139	153	165	172	180/180A	
	132	140	155	166	173	181/181A	
1	133	141/141A	157	166A/166B	174	191	

## **Terminal 3**

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A2	B11/B11A	B19	C29/C29A	C37/C37A
A3	B12/B12B	B20	C30/C30A	C38
A4	B13	B22	C31/C31A	C39/C39A
A5/A5B	B14/B14A	C24	C32	C40/C40A
A6	B15/B15A	C25	C33	C41
B8/B8A	B16	C26	C34/C34A	
B9	B17	C27/27A	C35	
B10	B18	C28	C36	
<u>IFC</u>				

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## Ramp Information Display System (RIDS)

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In the earlier Directive # 2019-D-003, which introduced the A-VDGS, the new Ramp Information Display System (RIDS) format was also introduced and it is reproduced here (in Table 2) for ease of reference. The RIDS will activate automatically up to 60 minutes prior to the next arrival or departure and will display the relevant arrival and departure flight information for that stand.

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\*\* Please note, that A-CDM information (i.e. TOBT, TSAT, EOBT, and EIBT) will only be displayed once in A-CDM Operations\*\*

Row	Arrival Ramp Information Display System (RIDS)	Departure Ramp Information Display System (RIDS)	
1	Flight Number	Flight Number	
2	City of Origin & Landed (if received)	City of Origin & Landed (if received)	
3	Aircraft Type	Aircraft Registration Number	

Table 2. Ramp Information Display System (RIDS) Format

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4	Aircraft Registration Number	Target Off-Block Time (TOBT, from A-CDM)	
5	Estimated In-Block Time (EIBT, from A-CDM)	Target Start-up Approval Time (TSAT, from A-CDM) if available, otherwise	
		Estimated Off-Block Time (EOBT, from A-CDM)	
6	Countdown to Arrival	Countdown to TOBT, if available else EOBT	
7	Inbound baggage information or	Outbound baggage information or	
	Free Text/Canned Messages	Free Text/Canned Messages	

Thank you,

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Craig Bradbrook Vice President, Aviation Services