Attachment 8

Operational Factors Group Chairman's Factual Report

DCA00MA030

Tailwind landings/Approach speeds

Approach Speeds

Approach Target Speeds

	Wind—Calm/ Light & Variable	Wind—Other Than Calm/ Light & Variable
Flaps 15 Flaps 30 Flaps 40	V_{REF} + 5 knots	V_{REF} + 1/2 Headwind + Full Gust

Headwind corrections are made for wind in the forward 180 degree arc (plus or minus 90 degrees from the runway heading). The maximum wind correction is 20 knots.

Fly V_{REF} +5 knots for tailwind landings.

Airspeed Cursor/Reference Marker Settings

The approach target speed should be indicated by the airspeed cursor. An airspeed reference marker (bug) should be set to indicate V_{REF} (**-700:** N/A).

Normally, the minimum final approach speed (target) should be V_{REF} + 5 knots, not to exceed V_{REF} + 20 knots. In the target speed calculation, the + 5 knots is considered part of any wind correction and is not additive. The purpose of the +5 knots is to ensure that V_2 is met in the event of a Go-around. Under adverse conditions, the Captain may elect to fly at V_{REF}. Under non-normal conditions the QRH may specify an increased V_{REF} for certain aircraft configurations. For example, the Asymmetrical Trailing Edge Flaps Checklist with flaps 1 or less, LEDs not fully extended, directs the pilot to "Set $V_{REF\ 40}$ + 55." The crew action will be to set an airspeed reference marker on this "corrected V_{REF}." Any wind correction will be added to establish a new target speed which is set with the airspeed cursor. (**-700**) The green "R" airspeed reference marker is set by selecting the apropriate speed on the CDU APPROACH REF page. Set the airspeed cursor to the appropriate speed using the MCP.

Note: Positioning of additional reference markers (bugs) is at the discretion of the pilot for all phases of flight.

V_{REF}

Weight (1000 lb)	Flaps		
	40	30	15
135	147	149	160
130	144	146	157
125	141	143	154
120	137	140	151
115	134	137	148
110	131	134	144
105	127	131	141
100	123	127	137
95	120	124	133
90	116	120	129
85	113	117	125
80	109	113	121
75	106	110	117
70	103	107	113

For approach speed add wind factor of 1/2 headwind component + peak gust (min 5 knots, max 20 knots)

(8)

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