



ASIAs Unstable Approach Criteria Thresholds

Rob Noges – Boeing
RASG-PA Runway Excursion Prevention Seminar
October 2014

Unstable Approach: 1000 to 500 ft HAT and <500 HAT – Must Exceed 3 or more

Category	Criteria	Threshold
ILS	1. Above Glideslope	> 1 dot high for 5 sec
	2. Below Glideslope	> 1 dot low for 5 sec
	3. Localizer Deviation	> 1 dot left/right for 5 sec
Airspeed	4. High Speed	> (Vref + 20 kts) for 3 sec
	5. Low Speed	< Vref for 3 sec
ROD	6. High Descent Rate	> 1000 ft/min for 3 sec
Thrust	7. Low Thrust Descent	N1 < 35% for 5 sec; N1 < 5 th Percentile by Fleet Type
Configuration	8. Late Flap Extension	Any flap movement > 2 degrees
	9. Late Gear Extension	Any gear movement
	10. Speed Brakes Deployed	Any deployment of speed brakes
Attitude	11. Unstable Pitch	Abs(Pitch) > 15 degrees for 3 sec; StDev(Pitch Rate) > 1.25
	12. Unstable Roll	Roll > 40 degrees for 3 sec; StDev(Roll Rate) > 3.5
	13. Unstable Yaw	StDev(Yaw Rate) > 1.25
GPWS	14. GPWS Alert	Any GPWS Alert

Egregious Unstable Approach Definition – Must Exceed 3 or more

Category	Criteria	Threshold
ILS	1. Above Glideslope	> 2 dot high for 5 sec, 500 to 200 ft HAT
	2. Below Glideslope	> 2 dot low for 5 sec, 500 to 200 ft HAT
	3. Localizer Deviation	> 3.5 dot left/right for 5 sec, 500 to 200 ft HAT
Airspeed	4. High Speed	> (Vref + 35 kts) for 3 sec, 500 to 50 ft HAT
	5. Low Speed	< (Vref – 3 kts) for 3 sec, 500 to 50 ft HAT
ROD	6. High Descent Rate	> 1500 ft/min for 3 sec, 500 to 50 ft HAT
Thrust	7. Low Thrust Descent	Below Approach Power Limit (Fleet Constant) for 5 sec, 500 to 50 ft HAT
Configuration	8. Late Flap Extension	Any flap movement, below 300 ft HAT
	9. Late Gear Extension	Any gear movement, below 1000 ft HAT
GPWS	10. GPWS Alert	Any GPWS Alert