



# Continuous Reliability Growth Planning Curve Risk Assessment (1/2)



Category	Low Risk	Medium Risk	High Risk
<u>MTBF Goal (DT)</u> MTBF GrowthPotential	< 70%	70 - 80%	> 80%
IOT&E Producer's Risk	≤ 20%	20+ - 30%	> 30%
IOT&E Consumer's Risk	≤ 20%	20+ - 30%	> 30%
Management Strategy	< 90%	90 - 96%	> 96%
Fix Effectiveness Factor	≤ 70%	70+ - 80%	> 80%
<u>MTBF Goal (DT)</u> MTBF Initial	< 2	2 - 3	> 3
Time to Incorporate and Validate Fixes in IOT&E Units Prior to Test	Adequate time and resources to have fixes implemented & verified with testing or strong engineering analysis	Time and resources for almost all fixes to be implemented & most verified w/ testing or strong engineering analysis	Many fixes not in place by IOT&E and limited fix verification

\* indicates strictly greater than

Programs should find an acceptable balance between these technical risks and their associated cost/schedule implications



# Continuous Reliability Growth Planning Curve Risk Assessment (2/2)



Category	Low Risk	Medium Risk	High Risk
Corrective Action Periods (CAPs)	5 or more CAPs which contain adequate calendar time to implement fixes prior to major milestones	3 - 4 CAPs but some may not provide adequate calendar time to implement all fixes	1- 2 CAPs of limited duration
Reliability Increases after CAPs	Moderate reliability increases after each CAP result in lower-risk curve that meets goals	Some CAPs show large jumps in reliability that may not be realized because of program constraints	Majority of reliability growth tied to one or a couple of very large jumps in the reliability growth curve
Percent of Initial Problem Mode Failure Intensity Surfaced	Growth appears reasonable (i.e. a small number of problem modes surfaced over the growth test do not constitute a large fraction of the initial problem mode failure intensity)	Growth appears somewhat inflated in that a small number of the problem modes surfaced constitute a moderately large fraction of the initial problem mode failure intensity	Growth appears artificially high with a small number of problem modes comprising a large fraction of the initial problem mode failure intensity

Programs should find an acceptable balance between these technical risks and their associated cost/schedule implications