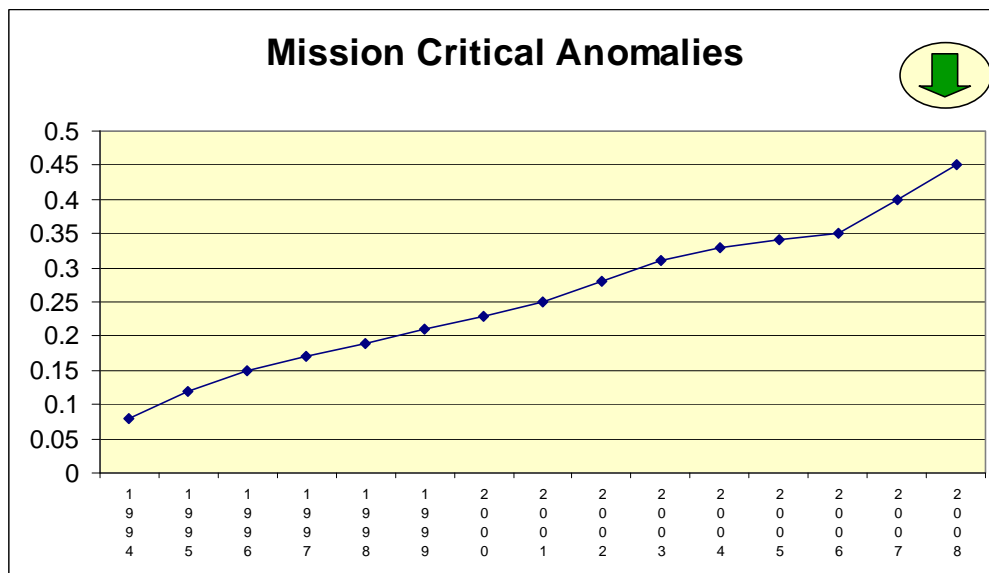


Mission Critical Anomalies Trend	
Information Need Description	
Information Need	Track the mission critical anomalies that either seriously degrade or end a mission within the first three years of operations.
Measurable Concept and Leading Insight	
Measurable Concept	Is the performance of our systems improving over time?
Leading Insight Provided	
Base Measure Specification	
Base Measure	1. Number of missions in their first three years during this time interval 2. Number of missions with critical anomalies in this time interval
Measurement Methods	Record actual anomaly information
Unit of Measurement	Anomalies
Derived Measure Specification	
Derived Measure	Trend of mission performance.
Measurement Function	(# missions with anomalies / # missions)
Indicator Specification	
Indicator Description and Sample	Trend graph of Percent Anomalies vs. Time
Decision Criteria	An upward trend would necessitate investigation and corrective action
Indicator Interpretation	This indicator is very slow to improve and must be tracked over years.



<b>Defect Escape Trends</b>	
<b>Information Need Description</b>	
<b>Information Need</b>	Examines the defects that evade in-phase detection.
<b>Measurable Concept and Leading Insight</b>	
<b>Measurable Concept</b>	Is the NRO improving the quality of the satellites?
<b>Leading Insight Provided</b>	Indicates whether the systems quality is maturing over the development cycle.
<b>Base Measure Specification</b>	
<b>Base Measure</b>	<ol style="list-style-type: none"> <li>1. Actual defects found (by system)</li> <li>2. Impact of each defect</li> <li>3. Phase defect was discovered</li> <li>4. Phase defect was injected</li> </ol>
<b>Measurement Methods</b>	<ol style="list-style-type: none"> <li>1. Record the number of defects found</li> <li>2. Assess the impact of each defect</li> <li>3. Record the phase where each defect was found</li> <li>4. Perform root cause analysis to determine where the defect was injected.</li> </ol>
<b>Unit of Measurement</b>	
<b>Derived Measure Specification</b>	
<b>Derived Measure</b>	<ol style="list-style-type: none"> <li>1. Defect escapes by phase</li> <li>2. Defect Discovery Success</li> </ol>
<b>Measurement Function</b>	<ol style="list-style-type: none"> <li>1. Indicate the number of defects found in each time interval, by phase found</li> <li>2. For all defects, sum the (phase detected - phase injected)/number of defects</li> </ol>
<b>Indicator Specification</b>	
<b>Indicator Description and Sample</b>	<ol style="list-style-type: none"> <li>1. Multiple-bar bar graph, plotting number of defects found. Each phase in a different color.</li> <li>2. Line graph of historical performance of shortened time to discovery.</li> </ol>
<b>Decision Criteria</b>	<ol style="list-style-type: none"> <li>1. Number of defect escapes should decrease over time in each phase, as well as phase to phase.</li> <li>2. Defect discovery time should decrease with time, as programs become more quality oriented.</li> </ol>
<b>Indicator Interpretation</b>	Used to indicate how well in-phase quality assurance activities are performing.

