<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Clarify &amp; Validate the Problem</td>
</tr>
<tr>
<td>2.</td>
<td>Break Down the Problem/Identify Performance Gaps</td>
</tr>
<tr>
<td>3.</td>
<td>Set Improvement Target</td>
</tr>
<tr>
<td>4.</td>
<td>Determine Root Cause</td>
</tr>
<tr>
<td>5.</td>
<td>Develop Countermeasures</td>
</tr>
<tr>
<td>6.</td>
<td>See Countermeasures Through</td>
</tr>
<tr>
<td>7.</td>
<td>Confirm Results &amp; Process</td>
</tr>
<tr>
<td>8.</td>
<td>Standardize Successful Processes</td>
</tr>
</tbody>
</table>
**USAF Problem-Solving Process & Related Toolsets**

<table>
<thead>
<tr>
<th>1. Clarify &amp; Validate the Problem</th>
<th>2. Break Down the Problem/Identify Performance Gaps</th>
<th>3. Set Improvement Target(s)</th>
</tr>
</thead>
</table>
| **a.** Does the problem, when solved, help meet needs identified by the organization?  
**b.** Is it linked to the SA&D of organization?  
**c.** Does it help satisfy customer needs (VOC)?  
**d.** Does this problem, when solved, address key issues identified during SWOT analysis?  
**e.** Has this problem been identified and directed by a Value Stream Map at the appropriate level?  
**f.** What does the “Future State” need?  
**g.** What resources have been identified to address this issue?  
**h.** What opportunities were identified or observed by the process or problem area “walk”?  
**i.** Will addressing or improving these issues deliver results that relate to #a or #b?  
**j.** Will addressing or improving this problem deliver the desired future state from #c? | **a.** Does the problem require more analysis or does leadership have enough information to execute a solution?  
**b.** If more data is needed, how do we measure performance now?  
**c.** What are the KPIs? What is the performance gap?  
**d.** Does other “non-existent” data need to be gathered?  
**e.** What does the data indicate are the potential root causes?  
**f.** Does the data review indicate a bottleneck or constraint? | **a.** Is the improvement target measurable? Is it concrete? Is it challenging?  
**b.** Is the target “Output Oriented”?  
**c.** What is the desired output?  
**d.** Should be “things to achieve”; should avoid “things to do”  
**e.** Will be addressed by Action Plans (Step 5)  
**f.** The desired target should:  
**g.** Do what? By how much? By when?  
**h.** If it is a Process Problem, what is the future state?  
**i.** How will it be realized? |

**TOOLS:** SA&D, Voice of Customer, VSM, Go & See

|------------------------|---------------------------|-----------------------------|
| **a.** What root cause analysis tools are necessary?  
**b.** Why are these tools necessary?  
**c.** What benefit will be gained by using them?  
**d.** Who will need to be involved in the root cause analysis?  
**e.** 10 heads are better than one  
**f.** Remember “cultural” issues related to problem  
**g.** What is (are) the root cause(s) according to the tools?  
**h.** How will the root cause be addressed?  
**i.** Will addressing these address the performance gap?  
**j.** Can the problem be turned on or off by addressing the root cause?  
**k.** Does the root cause make sense if the 5 Whys are worked in reverse?  
**l.** Working in reverse, say “therefore” between each of the “whys” | **a.** Develop potential countermeasures  
**b.** Select the most practical and effective countermeasures  
**c.** Build consensus with others by involving all stakeholders appropriately  
**d.** Communicate, communicate, communicate  
**e.** Create clear and detailed action plan  
**f.** B-SMART actions  
**g.** Reference Facilitation Techniques as appropriate | **a.** Which philosophy best prescribes tools that address root cause(s)?  
**b.** Which tools best address root cause(s)?  
**c.** Which method for implementation fits the tool and improvement need?  
**d.** If RIE or Project, create “Charter” and communicate  
**e.** What training or education is needed? By Whom? |

**TOOLS:** 5 Whys, Brainstorming, Pareto, Affinity, Fishbone, Control Charts

<table>
<thead>
<tr>
<th>7. Confirm Results &amp; Process</th>
<th>8. Standardize Successful Processes</th>
</tr>
</thead>
</table>
| **a.** How are we performing relative to the Observe phase (Steps 1 & 2)?  
**b.** How are we performing relative to Step 3?  
**c.** How are we performing relative to Financial Reporting Template projections?  
**d.** If we are not meeting targets, do we need to return to Step 4?  
**e.** Most problem solving “breakdowns” occur relative to improper root cause identification | **a.** What is needed to Standardize Improvements?  
**b.** Tech Order changes?  
**c.** Air Force Instruction changes?  
**d.** Official Instruction changes?  
**e.** Continuous Process Improvement – Mgt Tool (CPI-MT a.k.a. PowerSteering)  
**f.** Key meetings?  
**g.** Were there other opportunities or problems identified by the Problem Solving Process?  
**h.** Restart OODA Loop |

**TOOLS:** KPIs/Metrics, Performance Mgt, SA&D, Standard Work, Audit

**TOOLS:** Checkpoints/Standardization Table, Report Out Theme Story, Broad Implementation, CPI Mgt Tool