

Root Cause Analysis Report

600 Series - Aircraft Maintenance

Project Manager:

Administrator

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Generates a comprehensive report that outlines the performance gap, the cause of the problem and plausible solutions.

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Report

Task Analysis

Performance	
Task Title	Perform preventative maintenance on plane brakes system
Reference Code	PM-211
Evaluation Date	01/01/2021
Who Performs Task	Technician
Trigger	Delayed response from brake system, causing lag in in plane stoppage time
Location	Montreal
Actual Performance	Replace brake pads every 1,000 landings
Desired Performance	Replace brake pads every 2,000 landings.
Impact of Performance Gap	\$700000
Performance Gap	Significant
Perform Root Cause Analysis	Yes
Sequence	100

Evidence	
Evidence Date	12/31/2020
Evidence	Maintenance logs January 1, 2020 to December 31, 2020

Reliability	
Reliable	Yes
Reasons	Logs are kept by mechanic and then verified by supervisor

Difficulties	
Problems Encountered	Nil

Root Cause Analysis

Employees

Qualifications	
Employees Qualified to Perform Task	Yes
Employees Knowledge of Task	Adequate
Employees Have Skill to Perform Task	Somewhat
Employees Present Task Performance	Inconsistent
Employees Past Task Performance	Acceptable
Hiring More Experienced Personnel Will	Have no Impact
Employees Credibility Affected by Job Aid	No

Policies	
Employees Aware of Task Related Policies	Somewhat
Employees Understand Task Related Policies	Yes
Employees Can Apply Task Related Policies	Somewhat
Employees Attitude Towards Task Related Policies	Neutral
Employees Understand Expected Performance	Yes
Employees Know How Task is Evaluated	Yes

Interpersonal Skills	
Dependency on Others to Perform Task	Low
Employees Get Along with Colleagues	Yes
Employees Get Along with Managers	Yes
Received Interpersonal Skills Training	Informal
Impact of Interpersonal Skills on Task Performance	Low

Tools	
Employees Require Tools to Perform Task	Yes
Employees Have Access to Tools	Yes
Employees Can Use Tools	Yes
Employees Dependency on Tools	High

Feedback	
Employees Receive Work Related Feedback	No
Employees Receive Interpersonal Related Feedback	No

Incentives	
Task Related Incentive System Available	Informal
Employees Receive Incentives to Perform Task	Indirectly
Employees Attitude Towards Incentive System	Neutral
Employees Reprimanded for Poor Performance	Somewhat
Employees Attitude Towards Reprimand System	Neutral
Productive Performers Treated Better Than Poor	Somewhat
Employees Attitude Towards Short-Term Incentives	Neutral
Productivity Has Negative Consequences	No

Job Satisfaction	
Employees Turnover Rate Acceptable	Yes
Employees Dismissal Rate Acceptable	Yes
Employees Complaint about Tasks	Low
Employees Complaint about Job	Low
Employees Job Satisfaction	Low
Employees Overworked	Somewhat

Supervisors

Supervisors	
Supervisors Aware of Task Related Policies	Somewhat
Supervisors Understand Task Related Policies	Somewhat
Supervisors Can Apply Task Related Policies	Somewhat
Supervisors Can Implement Incentive System	Somewhat
Supervisors Complaints about Personnel Performance	Low
Supervisors Leadership Skills	Acceptable
Supervisors Organizational Skills	Somewhat
Manage Too Many Personnel	Somewhat
Manage Too Many Tasks	Somewhat

Feedback

Feedback	
Accuracy of Task Related Feedback	Good
Depth of Task Related Feedback	Varies
Timing of Task Related Feedback	Varies
Frequency of Interpersonal Related Feedback	Somewhat
Depth of Interpersonal Related Feedback	Good
Timing of Interpersonal Related Feedback	Good

Policies

Policies	
Task Related Policies Exist	Yes
Task Related Policies Clear	Yes
Importance of Policies in Performing Task	Moderate
Employees Performance Measured	Yes
Measurement of Task Performance is	Objective
Policies Interfere with Employees Performance	No
Overlap in Steps Required to Perform Task	Somewhat
Procedures Unnecessarily Repeated	No

Tools

Tools	
Effectiveness of Existing Tools	High
Number of Additional Tools Required	Medium
Reliability of Existing Tools	High
Availability of Existing Tools	Moderate
Better Tools Available	Yes

Tasks

Tasks	
Consequences of Errors	High
Complexity of Task	Medium
Can Task be Simplified	No
Work Environment Constantly Changing	Somewhat
Percent of Delays Caused by Other Employees	High
Employees Find Task Challenging	No

Environment

Environment	
New System/Regulation Introduced	No
Impact of New System/Regulation on Organization	Low
Impact of New System/Regulation on Task	Low
Training Provided for New System/Regulation	Not applicable
New Procedures Introduced	Not applicable
Impact of New Procedures on Tasks	Not applicable
Training Provided for New Procedures	Not applicable
Existing Policies Adequate	Yes
Existing Processes Adequate	Yes
Existing Structure Adequate	Yes
Number of New Employees Hired	Low
Training Provided to New Employees	Formal
Division Response to Past Changes Acceptable	Yes
Division Structure/Goals Relationship Clear	Yes

Recruitment

Recruitment	
Recruitment Conducted	Combined
Personnel Selection Procedures Effective	Yes
Recruitment Personnel Qualifications Acceptable	Yes

Plausible Solutions Result

Impact	Solution Type	Lock
Medium	Knowledge/Skills Training	
	Interpersonal Skills Training	
	Policies/Procedures Training	
	Tools Training	
	Supervisor Incentive System Training	
	Supervisor Policies/Procedures Training	
	Supervisor Leadership Skills Training	
	Supervisor Organizational Skills Training	
Medium	Job-Aids	
	Work Related Feedback	
	Colleagues Feedback	
	Supervisor Feedback	
	Communicate Procedures	
	Communicate Expected Performance	
	Communicate How Task is Evaluated	
	Communicate Policies/Procedures to Supervisors	
	Communicate Evaluation Procedures to Supervisors	
	Incentive System	
	Improve Incentive System	
	New Policies/Procedures	
Medium	Improve Policies/Procedures	
Medium	New Tools	
Medium	Improve Access to Tools	
	Improve Hiring Practices	
	Improve Personnel Selection Procedures	
	Improve Qualifications of Recruitment Personnel	
	Organizational Redesign	
	Process Redesign	
	Job Redesign	
	Supervisor Job Redesign	

Solution Recommended Because:	
Knowledge/Skills Training	
Employees Have Skill to Perform Task	Somewhat
Employees Qualified to Perform Task	Yes
Job-Aids	
Complexity of Task	Medium
Consequences of Errors	High
Employees Credibility Affected by Job Aid	No
Employees Have Skill to Perform Task	Somewhat
Employees Knowledge of Task	Adequate
Employees Qualified to Perform Task	Yes
Work Environment Constantly Changing	Somewhat
Improve Policies/Procedures	
Importance of Policies in Performing Task	Moderate
Overlap in Steps Required to Perform Task	Somewhat
Task Related Policies Exist	Yes
New Tools	
Employees Can Use Tools	Yes
Employees Dependency on Tools	High
Employees Require Tools to Perform Task	Yes
Number of Additional Tools Required	Medium
Improve Access to Tools	
Availability of Existing Tools	Moderate
Employees Can Use Tools	Yes
Employees Dependency on Tools	High
Employees Require Tools to Perform Task	Yes