

**Project Closure Report**



**Project Name:** Aircraft RD Seven

**Department:** Research and Development

**Focus Area:** New Technology

**Product/Process:** Single Engine Aircraft Line



**Prepared By**

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**Project Closure Report Version Control**

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| Initial Release | March 2, 2013 | Marc McCune | Document created |
| R1 | March 05, 2014 | Ms. Joan Smith | Added discovery items from engine test results |
| R2 | Jan. 15, 2015 | Mr. Fred Product | Revised built constraints due to lean practices built into second full test article |

**Note** For standard sections of the Project Closure Report template that have been excluded from the present document, the section headings have been moved to the Project Closure Report Sections Omitted list at the end.

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# PROJECT CLOSURE REPORT PURPOSE

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| **Project Closure Report Purpose** |
| This report will identify closure of the project and aid the transition process to the next project, production of the output from this project. |



# PROJECT CLOSURE REPORT GOALS

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| **Project Closure Report Goals** |
| This Project Closure Report is created to accomplish the following goals:   * Review and validate the milestones and success of the project. * Confirm outstanding issues, risks, and recommendations. * Outline tasks and activities required to close the project. * Identify project highlights and best practices for future projects, i.e. the production phase. |



# PROJECT CLOSURE REPORT SUMMARY

## Project Background Overview

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| **Project Background Overview** |
| The project will provide an improved single engine aircraft that will perform on flex fuels, by developing an engine within one year of the project initiation and performing experimental flight test on a current platform in the next year of the project while developing the company’s new airframe. |

## Project Highlights and Best Practices

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| **Project Highlights and Best Practices** |
| Project Highlights:   1. Develop an engine within one year of the project. 2. Perform experimental flight test on a current platform in the next year of the project while developing the company’s new airframe.   Best Practices:   * Lean Six Sigma utilized as an evaluation tool, implementation taken on second test article. * Root cause analysis, along with Lean Six Sigma, utilized for quality escapes to implement effective and efficient solutions. |

## Project Closure Synopsis

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| **Project Closure Synopsis** |
| * This project is being close because all objectives have been met. A successful test article has been produced and tested. With project closure the output can begin its initiation phase. |



# PROJECT METRICS PERFORMANCE

## Goals and Objectives Performance

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| **Goals and Objectives Performance** |
| The project was originally scheduled to last two years. Due to supplier lead times the project lasted two years and four months. All remaining goals and objectives were met. |

## Success Criteria Performance

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| **Success Criteria Performance** |
| * Technical aspects of the project were fully achieved. * The schedule was not achieved due to supplier delivery constraints. * Sally Parks, procurement, is responsible for, 1) working with current supplier to improve delivery schedule of parts, or 2) find a new supplier. |

## Milestone and Deliverables Performance

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| **Milestones and Deliverables Performance** |
| * All deliverables were achieved with acceptable quality. * The reason for just an acceptable level of quality is that many test components required location adjustments and/or modifications. * The location adjustments and/or modifications made have been incorporated into the final release data and will be used on production articles. |

## Schedule Performance

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| **Schedule Performance** |
| Project Schedule Overview:  Test article to be complete within year one.  Project Schedule Control Process:  Flight test was to be complete within the second year.  Project Schedule Corrective Actions:  1) Working with current supplier to improve delivery schedule of parts, or 2) find a new supplier.  Project Schedule Integration with Managing Project:  The supplier improvement will be fully implemented before completion of the first production article, (the next project utilizing this projects output). |

## Budget Performance

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| **Budget Performance** |
| Project Budget Overview:  The project was budgeted at three million dollars US. This was exceeded by 150,000 dollars US primarily due to the requirement to fabricate parts due to supplier delivery constraints.  Project Budget Corrective Actions:  Procurement is identifying contract agreements for promised delivery times and applicable penalties for late delivery. Most if not all the budget over runs are expected to be recuperated. |

## Metrics Performance Recommendations

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| **Metrics Performance Recommendations** |
| Incorporate lean recommendations from the RD Seven Lean Committee. Archives are held in company network assets. Details can also be obtained from the Industrial Engineering Group, Department 794. |



# PROJECT CLOSURE TASKS

## Resource Management

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| **Resource Management** |
| * Supplier’s production capabilities review was inadequate at the time of project initiation. A new audit checklist, because of root cause analysis, has been developed to include this aspect. * Many resources utilized for this project, (building, tools, labor), will be shifted to the production project of this output. Residual resources will be either auctioned or scrapped as was built into the budget. * Engineering, technicians, and inspection personnel will be shifted to the new production project. A member from each group will develop, in conjunction with the Training Department, formal classroom training for production personnel. The remaining workforce will provide on the job training to production personnel. |

## Issue Management

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| **Issue Management** |
| * The issue of supplier capability is currently outstanding. * Sally Parks with Procurement Management is responsible for closure of this issue. |

## Risk Management

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| **Risk Management** |
| Project Risks Mitigated:  The risk of engine performance at altitude was resolved by fuel delivery pressure parameters established during computer modeling of the product.  The risk of being able to produce the engine in the manufacturing environment was mitigated by the use of lean tools.  Outstanding Project Risks:  Product reliability will be the next most significant risk to mitigate. Joe Dawkins, Engineering Department is responsible to track and resolve any reliability issues. |

## Quality Management

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| **Quality Management** |
| Quality escapes have been captured during this project by statistical review and pareto analysis items resolved. This and product audit management assets have been transferred to the company network drive to resource during the production project. |

## Communication Management

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| **Communication Management** |
| * Communications management was mostly effective with exception to the liaison with local media during the flight test phase. * New contacts were established with the local media, (previous contact could not leverage our information to the proper media channels). |

## Customer Expectation Management

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| **Customer Expectation Management** |
| * Customer expectations: * Internal: Internal customer expectations were achieved. * External: Supplier involvement was increased and production contracts created to make them a shared stakeholder of the product. * External Buyer: Market surveys indicate high interest in the product. |

## Asset Management

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| **Asset Management** |
| * Many resources utilized for this project, (building, tools, labor), will be shifted to the production project of this output. Residual resources will be either auctioned or scrapped as was built into the budget. Sally Parks is responsible for allocation of residual resources. * Engineering, technicians, and inspection personnel will be shifted to the new production project. A member from each group will develop, in conjunction with the Training Department, formal classroom training for production personnel. The remaining workforce will provide on the job training to production personnel. Hank Wickin, Training Coordinator, is responsible for all transition-training requirements. |

## Lessons Learned

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| **Lessons Learned** |
| * Computer modeling and simulation test was effective at establishing build criteria with efficient resource allocation, (in lieu of the fly and try method). * Lean Six Sigma worked well in identifying build cycle flow issues and resolutions. * Supplier expectations need to be more predetermined. Commitments made by suppliers require clear repercussions to avert schedule slips. A more effective pre-qualifying assessment has been implemented. |

## Post project Tasks

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| **Post project Tasks** |
| * Resource re allocation with Sally Parks being responsible. * Hank Wickin is responsible for transition training * Joe Dawkins is responsible for reliability tracking of test articles. |

## Project Closure Recommendations

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| **Project Closure Recommendations** |
| * This project has fulfilled all of the requirements as documented. Issues that require follow up have been assigned to the appropriate individuals. |



# PROJECT CLOSURE REPORT APPROVALS

**Prepared By** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Approval Date** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

