

NASA PROJECT DOCUMENTS

Descriptions of Project Documents

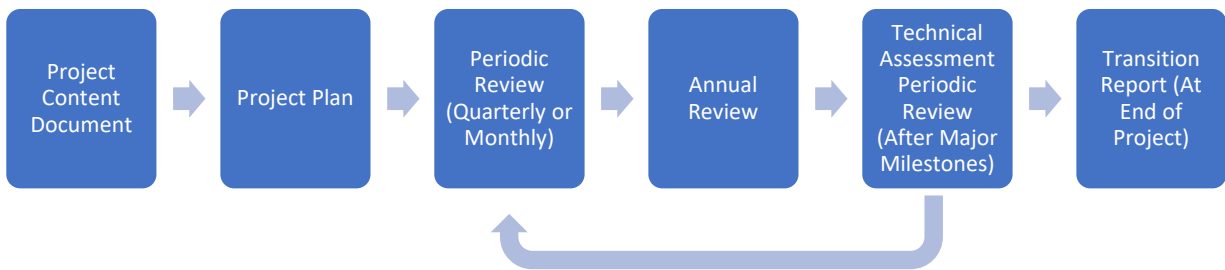


Figure 1 - Order of Regularly Occurring Project Management Documents

PROJECT CONTENT DOCUMENT

A Project Content Document lays out the Objectives, Deliverables, Key Performance Parameters, and Resource Requirements for a proposed project. Unlike a Project Plan, this document does not provide the Technical Approach, Risks, or more detailed information about how the Objectives will be met. If this project is approved, this document will be expanded into a full Project Plan.

PROJECT PLAN

A Project Plan lays out the “contract” of objectives and milestones between the project team and the Program Office. The Program Office provides funding for labor and procurements and the project team develops technologies per the agreed plan. The Project Plan lays out the Objectives for the project, Success Criteria, Technical Approach, Technical Requirements, expected challenges and risks, Milestones, Key Performance Parameters required, proposed Technology Readiness Level (TRL) Advancement, Organizational Structure, Roles and Responsibilities, Funding Requirements, Schedule, Work Breakdown Structure (WBS) and an Acronym List. The Project Plan will also lay out the risks that the team expects to face during the project, but this list will likely not be comprehensive as many more risks are identified throughout the project. **Improving this initial list of risks is one of the main goals of this project.**

PERIODIC REVIEW (QUARTERLY OR MONTHLY REVIEWS)

A Monthly or Quarterly Review provides an update on the accomplishments of the project and the status of the project compared to the Project Plan. The Periodic Review includes the project schedule and the current relative status of the project. It also shows a Project Assessment Summary with the status of the overall project and each major technical component for each “affinity” or type (Technical, Cost, Schedule, & Programmatic) of risk in a relative level of criticality from Low (green) to Medium (yellow) to High (red). The criticality scores are based off of the color-coded sections of the 5x5 risk matrix in the appendix of the review document. The Periodic Review also includes the milestones to date with their due dates from the project plan and the actual date when they were accomplished. The Periodic Review highlights any significant

challenges to the project completion. In the appendix, the Periodic Review includes a risk summary slide with each identified risk placed on the 5x5 matrix, the category of the risk, the trend of the risk (increasing or decreasing), and the project's approach to the risk (Mitigate, Watch, Accept, Research). The Periodic Review includes detailed information on each risk identified to date.

ANNUAL REVIEW

The Annual Review presents an overview of the program and its accomplishments to date. The Annual Review also includes the project schedule and status of the project. The Annual Review also includes a risk summary slide with each identified risk placed on the 5x5 matrix, the affinity of the risk, the trend of the risk (increasing or decreasing), and the project's approach to the risk (Mitigate, Watch, Accept, Research). In the Appendix, there is detailed information about the status of each risk that has been identified. It also shows a Project Assessment Summary with the overall project status and classifies each major technical component by "affinity" or type of risk (Technical, Cost, Schedule, & Programmatic) and their level of criticality from Low (green) to Medium (yellow) to High (red).

TECHNICAL ASSESSMENT PERIODIC REVIEW RECOMMENDATION REPORT (FORMERLY CONTINUATION REVIEW BOARD)

The Technical Assessment Periodic Review (TAPR) assesses actual performance against expected performance as specified in the approved Project Plan for multi-year projects. This recommendation report is the output from the TAPR. The TAPR occurs after key technical milestones. The TAPR includes information about the state of the project and its technical status. The Review includes detailed context on the project's status and the concerns of the reviewers. The Review includes a risk summary slide with each identified risk placed on the 5x5 matrix, category of the risk, trend of the risk (increasing or decreasing), project's approach to the risk (Mitigate, Watch, Accept, Research), and detailed information on each risk identified to date.

Performing a risk search using this Risk Digital Assistant just prior to the TAPR reviews would be ideal for the review board members.

TRANSITION REPORT

The Transition Report is produced at project completion as the closeout document. It describes a summary of the Project, its Objectives, Technical Approach, Accomplishments, Technical Performance, actual performance against Key Performance Parameters, Technology Gaps Closed, Remaining Gaps and Risks, Programmatic and Schedule Performance, status compared to Success Criteria, Transition Activities, Technology Readiness Level (TRL) Assessment, and Lessons Learned. This document can be used to identify how the risks identified earlier in the project impacted the project and were converted to lessons learned.



Figure 2: Order of Risk Mitigation Project Documents (Occurs Continuously Throughout a Project)

CHANGE REQUEST

A Change Request is submitted after a risk has been identified that poses a challenge to the project schedule. A Change Request modifies the original Project Plan by either changing the scope of the objectives, budget requested, project plan, project schedule, or due date to mitigate the identified risk. A Change Request indicates that an identified risk is significant enough to require a change to the project plan.

PROJECT PLAN REVISION

A Revised Project Plan is the updated Project Plan after a Change Request has been accepted. It includes the rationale for the updates to the project plan in the Document History Log. The Project Plan will lay out the risks that the team expects to face during the project, but this list will likely not be comprehensive as many more risks are identified throughout the project. Improving this initial list of risks is one of the main goals of this project.

Documents Provided: Project 1 – Astrobee

Document Name: **GCD Continuation Review Board Recommendation Memo**

Date: 11/17/15

Document Type: Technical Assessment Periodic Review (Formerly Continuation Review Board)

File Name: GCD Continuation Review Board Recommendation Memo for the HET2-Astrobee.pdf

Document Name: **Space Technology Mission Directorate Game Changing Development Program
FY2016 3rd Quarter Review**

Date: 7/19/16

Document Type: Periodic Review (Quarterly Review)

File Name: 20170718_HET2_GCD FY16 Q3 Review.pptx

Document Name: **GCD Continuation Review Board Recommendation Memo**

Date: 7/21/16

Document Type: Technical Assessment Periodic Review (Formerly Continuation Review Board)

File Name: GCD Continuation Review Board Recommendation Memo for the HET2-Astrobee Proj.pdf

Document Name: **Human Exploration Telerobotics 2 (HET2) Project Plan (Revision B)**

Date: 12/21/16

Document Type: Project Plan Revision

File Name: GCDP-02-PLN-14080-_B_12-21-2016_HET2-Project-Plan.docx

Document Name: **Game Changing Program Control Board (GPCB) Change Request**

Date: 6/17/17

Document Type: Change Request

File Name: 2017-06-17 Astrobee GPCB CR Form.docx

Document Name: **Space Technology Mission Directorate Game Changing Development Program FY19 Annual Review Presentation**

Date: 9/25/19

Document Type: Annual Review

File Name: Astrobeer FY19 Annual Review Presentation.pptx

Document Name: **HET2 Astrobeer Transition Report**

Date: 12/6/19

Document Type: Transition Report

File Name: GCDP-02-RPT-20026_-_12-6-2019_Astrobeer Transition Report.pdf

Documents Provided: Project 2 – SynBio

Document Name: **Synthetic Biology Project Content Document**

Date: 4/29/19

Document Type: Project Content Document

File Name: 20200423_Syn Bio PCD SP v0.doc

Document Name: **PPBE 22 – Existing Projects – New Content FY20 Synthetic Biology**

Date: 2/28/20

Document Type: Program Planning and Budgeting Exercise

File Name: GCD PPBE22 New Content Existing Projects_Syn Bio.pptx

Document Name: **Synthetic Biology Project Plan**

Date: 9/17/20

Document Type: Project Plan

File Name: GCD Project Plan SynBio _draft_09-17-20.docx

Document Name: **Synthetic Biology Project FY21 Mid-Year Review Presentation**

Date: 3/13/21

Document Type: Periodic Review (Quarterly Review)

File Name: FY21 GCD MYR – SynBio 210303.pdf

Document Name: **Synthetic Biology Project Monthly Status Report 04.2021**

Date: 4/21

Document Type: Periodic Review (Monthly Review)

File Name: SynBio – April 2021 Monthly Status Report.pptx

Document Name: **Game Changing Program Control Board (GCPCB) Change Request**

Date: 4/19/21

Document Type: Change Request

File Name: Request to move BioNutrients task Generation 1 Flight Pack Design Review
Milestone_GPCB-CR-01285 (FER).docx

Document Name: **Synthetic Biology Project Monthly Status Report 05.2021**

Date: 5/21

Document Type: Periodic Review (Monthly Review)

File Name: SynBio – May 2021 Monthly Status Report.pptx

Document Name: **Technical Assessment Periodic Review (TAPR) Summary Report for the Synthetic Biology (SynBio) Project**

Date: 7/7/21

Document Type: Technical Assessment Periodic Review

File Name: GCDP-02-RPT-21075_Syn Bio TAPR Summary Report.docx