



Procedures and Guidelines (PG)

DIRECTIVE NO. 820-PG-1060.2.1C

EFFECTIVE DATE: April 28, 2014

EXPIRATION DATE: April 28, 2021

APPROVED BY Signature: Original Signed by

NAME: Debora A. Fairbrother

TITLE: Chief, Balloon Program Office

COMPLIANCE IS MANDATORY

Responsible Office: 820/Balloon Program Office

Title: Balloon Program Management Review and Reporting for Programs and Projects

PREFACE

P.1 PURPOSE

This Procedure and Guideline (PG) establishes the procedures for Balloon Program and Projects reviews and reporting.

P.2 APPLICABILITY

This PG is applicable to the Goddard Space Flight Center (GSFC), Wallops Flight Facility (WFF), Suborbital and Special Orbital Projects Directorate (SSOPD), Balloon Program Office (BPO), and all organizations participating in the program, as well as project activities in support of NASA's Balloon Program, to include any government agency or contractor.

P.3 AUTHORITY

- a. GPR 1060.3, The Goddard Governance Structure
- b. 800-PG-1060.2.1, Suborbital and Special Orbital Projects Directorate Reviews

P.4 REFERENCES

800-PG-8621.0.1, Suborbital Anomaly Investigation and Reporting
820-FORM-2010-6, BPO Mission Manager Launch Procedure

P.5 CANCELLATION

820-PG-1060.2.1B, Balloon Program Management Review and Reporting for Programs and Projects

P.6 SAFETY

N/A

P.7 TRAINING

N/A

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P.8 RECORDS

| Record Title | Record Custodian | Retention |
|---|---|---|
| Program Office MSR Briefing Package | 820 Records Custodian | NRRS 1/14B1(a) Permanent. Retire to FRC when 2 years old. Transfer to NARA when 20 years old. |
| Project Initiation Conference File | 820 Records Custodian | NRRS 8/101 Permanent. Cutoff records at close of program/project or in 3 year blocks for long term programs/projects. Transfer to records center storage. Transfer to National Archives 7 years after cutoff. |
| Flight Requirements Meeting File | Prime contractor at Columbia Scientific Balloon Facility (CSBF) | NRRS 8/101 |
| Mission Readiness Review File | 820 Records Custodian | NRRS 8/101 |
| Campaign Flight Readiness Review (FRR) File | 820 Records Custodian | NRRS 8/101 |
| WFF Approval To Proceed (ATP) File | 820 Records Custodian | NRRS 8/101 |
| Mission Flight Readiness Review File | 820 Records Custodian / Prime Contractor at CSBF | NRRS 8/101 |
| Post Flight Mission Success Assessment | Prime Contractor at CSBF | NRRS 8/101 |
| Mishap and Close Call Reporting, Investigating, and Recordkeeping | 820 Records Custodian | NRRS 8/101 |
| Balloon Project Reviews Files | Project/Mission Manager | NRRS 8/101 |

* *NRRS – NASA Records Retention Schedule (NPR 1441.1)*

P.9 MEASUREMENT/VERIFICATION

N/A

PROCEDURES

In this document, a requirement is identified by “shall,” a good practice by “should,” permission by “may” or “can,” expectation by “will,” and descriptive material by “is.”

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- 1.0 Monthly Status Review (MSR) – The Chief, Balloon Program Office, or designee, will report a MSR briefing package to the Director of SSOPD, or designee. This report will include (or as directed) program status on budgets, staffing, contracts, flight activities, safety, and special projects. The record includes a program office MSR briefing package.
- 2.0 Project Initiation Conference (PIC) – For major flight campaigns, a PIC will be conducted by the Chief, Balloon Program Office, or designee, in accordance with applicable Program Formulation and Program Management procedures and requirements. The PIC will review Columbia Scientific Balloon Facility (CSBF) and science requirements, operation support plans, schedules, and identify action items. The record includes a PIC report, action items, and action item closeout, as required.
- 3.0 Flight Requirements Meeting (FRM) – In accordance with applicable Program Formulation and Program Management procedures and requirements, the prime contractor responsible for operation of the CSBF shall conduct a Flight Requirements Meeting prior to final payload integration and testing. This meeting will be for the purpose of review and update of requisite documentation of all science and operational requirements prior to making final configurations before each flight. Participants include CSBF Operations and Science users. Records include updated flight requirements forms that are generated and maintained by the prime contractor.
- 4.0 Mission Readiness Review (MRR) – For major campaigns a MRR shall be conducted by the BPO to independently assess the readiness of science and operations support prior to shipment to the launch site. The Chief, Balloon Program Office, or designee, will make any final decisions as to continuance of the mission if any MRR actions are not adequately addressed. The record includes a MRR report, action items, and action item closeout.
- 5.0 Campaign Flight Readiness Review (FRR) – Following closeout of all campaign/mission reviews, documentation, and action items, the BPO shall conduct a Campaign FRR with the Director, SSOPD and Chief, WFF Safety Office, or their designees. The review will cover campaign implementation, overview mission and safety documentation, reviews, operations readiness, and science status.
- 6.0 WFF Approval To Proceed (ATP) – The BPO shall request conduct of an ATP with the Director, SSOPD and Chief, WFF Safety Office, or their designees following closeout of all campaign/mission reviews, documentation, and action items, and typically in tandem with the Campaign FRR. The BPO shall generate the ATP request (form) for signature by the Director, SSOPD, or his designee, authorizing approval to proceed with the campaign.
- 7.0 Mission Flight Readiness Review –The NASA Mission Manager and CSBF Campaign Manager shall conduct a Mission FRR prior to each launch. The record includes the 820-FORM-2010-6, Mission Manager Launch Procedure maintained by the BPO, as well as completed CSBF Operations flight support plans, and certifications that are generated and maintained by the prime contractor.

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- 8.0 Post Flight Minimum Success Assessment - In accordance with applicable Program Formulation and Program Management procedures and requirements, the prime contractor responsible for operation of the CSBF will obtain a completed Post Flight Minimum Success Assessment following each flight from the Principal Investigator. This record will assess their satisfaction with CSBF support in achieving their science requirements. The record is the Post Flight Minimum Success Assessment maintained by the prime contractor and a copy is included in the Flight Summary package provided to the BPO.
- 9.0 Mishap and Close Call Reporting, Investigating, and Recordkeeping – When an incident occurs that is covered by accepted risks delineated in the BPO mission project plan, a mishap, anomaly, or close call will be reported, and an investigation per 800-PG-8621.0.1, *Suborbital Anomaly Investigation and Reporting*, will be conducted to improve safety by identifying what happened, where it happened, when it happened, why it happened, and what should be done to prevent recurrence in the future. A preliminary report of any mishap, anomaly or close call shall be reported to the Director of SSOPD, as soon as possible, following such an occurrence. In addition, a preliminary report will be submitted to the Wallops Safety Office.
- 10.0 Balloon Project Reviews – Balloon Projects shall be reviewed in accordance with specific project plans per applicable Program Formulation and Program Management procedures and requirements.

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Appendix A – Definitions

- A.1 Mission Manager – Serves as the single point of contact between NASA and CSBF operations on behalf of the BPO Contracting Officers Representative and provides mission safety and project oversight.
- A.2 Prime Contractor – The NASA Scientific Balloon Program’s prime support contractor performing services under the contract for operation of the Columbia Scientific Balloon Facility (CSBF).
- A.3 Principal Investigator – The lead point of contact for a balloon project team.
- A.4 Program Office – The NASA Balloon Program Office.
- A.5 SSOPD – Suborbital and Special Orbital Projects Directorate, which is comprised of NASA Code 800 Offices, to include the Balloon Program Office, Code 820.

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Appendix B - Acronyms

| | |
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| ATP | Approval to Proceed |
| BPO | Balloon Program Office |
| CSBF | Columbia Scientific Balloon Facility |
| FRM | Flight Requirements Meeting |
| FRR | Flight Readiness Review |
| GSFC | Goddard Space Flight Center |
| MRR | Mission Readiness Review |
| MSR | Monthly Status Review |
| PIC | Project Initiation Conference |
| SSOPD | Suborbital and Special Orbital Projects Directorate |
| WFF | Wallops Flight Facility |

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CHANGE HISTORY LOG

| Revision | Effective Date | Description of Changes |
|----------|-------------------|--|
| Baseline | April 3, 2003 | Initial Release |
| A | February 16, 2005 | Modified to clarify all requirements in accordance with Center Rules Review Committee recommendations. Updated References. Deleted reviews no longer required. |
| B | February 9, 2010 | Modified procedures in accordance with updated Code 800 PG and Center procedural requirements. Updated template, records, references, and definitions. |
| C | April 28, 2014 | Change in Authority document from GPR 1060.2 to GPR 1060.3. Updated records section. Added Campaign Flight Readiness Review, ATP, Mission Flight Readiness Review. Updated Mission Readiness Review and Post Flight Assessment. Deleted Flight Readiness Review. |
| | April 25, 2019 | Administratively extended for 1 year. |
| | June 27, 2020 | Administratively extending to allow for updates. |
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