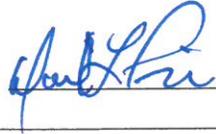




## Procedures and Guidelines (PG)

**DIRECTIVE NO.** 800-PG-1060.2.1G  
**EFFECTIVE DATE:** April 10, 2014  
**EXPIRATION DATE:** October 4, 2020

**APPROVED BY Signature:**   
**NAME:** David L. Pierce  
**TITLE:** Director of Suborbital and Special Orbital Projects

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### COMPLIANCE IS MANDATORY

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**Responsible Office:** 800/Suborbital and Special Orbital Projects Directorate

**Title:** Suborbital and Special Orbital Projects Directorate Reviews

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## PREFACE

### P.1 PURPOSE

The purpose of this procedure is to document the review process for the Suborbital and Special Orbital Projects Directorate (SSOPD).

### P.2 APPLICABILITY

This document is applicable to all reviews required by the SSOPD at the directorate level. All offices within the SSOPD will have, and document, their own review process for programs and projects for which they are responsible.

### P.3 AUTHORITY

GPR 1060.3, The Goddard Governance System

### P.4 REFERENCES

NPR 7900.3, Aircraft Operations Management Manual

### P.5 CANCELLATION

800-PG-1060.2.1F, Suborbital and Special Orbital Projects Directorate Reviews

### P.6 SAFETY

N/A

### P.7 TRAINING

N/A

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## P.8 RECORDS

Record Title	Record Custodian	Retention
Monthly Status Review to CMC	Code 100	NRRS 1/14 B1(a) Permanent. Retire to FRC when 2 years old. Transfer to NARA when 20 years old.
Monthly Status Review to WFF Management	Directorate Office	NRRS 1/14 B1(a)
Range Readiness Review File	**Directorate Office and organization with prime responsibility	NRRS 1/14 B1(a)
Annual Anomaly Review	Project Office with prime responsibility	NRRS 1/14 B1(a)
Launch Readiness Review File	**Directorate Office and organization with prime responsibility	NRRS 1/14 B1(a)
Mission Readiness Review File	**Directorate Office and organization with prime responsibility	NRRS 1/14 B1(a)
Preliminary Design Reviews File	Organization with Prime Responsibility	NRRS 1/14 B1(a)
Critical Design Reviews File	Organization with Prime Responsibility	NRRS 1/14 B1(a)
Executive Safety Council	Code 803 Safety Office	NRRS 1/14 B1(a)
Environmental Program Coordination Committee Status Review File	Code 250 (Safety and Environmental Division, Wallops Environmental Office)	NRRS 1/14 B1(a)
Systems Reviews File	Office with Programmatic Responsibility	NRRS 1/14 B1(a)
Airworthiness Review Board File	Code 830 Aircraft Office	NRRS 1/14 B1 (a)
Waivers, Deviations, or Variances	Directorate Office/Safety Office	<u>NRRS 8/103</u> – Destroy/delete between 5 and 30 years after program/project termination.
Appointment Letters/Memorandums	Directorate Office	NRRS 1/14 B1 (a)
Approval to Proceed (ATP) Memorandum	Project Manager of project requiring ATP	NRRS 1/14 B1(a)

\* NRRS – NASA Records Retention Schedule ([NPR 1441.1](#))

\*\* See review narrative for records custodian

## 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.”

### 1.0 REVIEWS

#### 1.1 Monthly Status Review (MSR)

- a. MSR to Center Management Council (CMC) – each programmatic office and each major program (as determined by the Director of Code 800) will present monthly their status, issues, schedules, risk assessment, and other points of interest. The normal MSR process will be followed. Records are kept by Code 100.

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b. MSR to WFF management – major projects within the Code 800 directorate, as determined by the Directorate Office, will conduct MSRs for Code 800 senior management and management from other organizations involved in the project including but not limited to Code 200, Code 300, Code 500, partners, and participating scientists. These reviews will cover status issues, schedules, risk assessment and other points of interest. These reviews will cover project level, system level and subsystem level discussions as appropriate. Also discussed will be status of actions from previous MSRs. The Director of SSOPD or his designee will chair these reviews. The records for this review will be maintained by the SSOPD and will contain the agenda, presentations, action items generated, and action item closeout.

**1.2 Range Readiness Review (RRR)** - This review assesses the readiness of the range to support missions launched from WFF or from other locations where WFF functions as the lead range. The chair and members of the review board will be appointed by the Director of SSOPD or his designee. For orbital missions this review will be conducted approximately 2-weeks before the scheduled launch. SSOPD will maintain the appointment memorandum. The action items memo, action items response memo, action items closeout memo, attendance list, and the presentation material from this review will be maintained by the organization conducting the mission.

**1.3 Launch Readiness Review (LRR)** - This review is required by GSFC for NASA Orbital Missions launched from WFF or for missions that WFF will act as the lead range. This review is chaired or co-chaired by the Director of SSOPD. The chairperson will appoint the review board members. This review will assess the readiness for launch of systems and payload hardware, software, safety, and operational support. It will also assess the readiness of WFF to support the launch. The LRR shall also assure the proper closeout of any action items generated from the Center Director's Mission Readiness Review. The LRR is normally conducted approximately 3-days before the scheduled NASA orbital launch. This review is not normally required for a non-NASA orbital mission. SSOPD will maintain the appointment memorandum. The records for this review, contained in the project file and maintained by the organization with prime responsibility, will consist of the attendance list, presentations, action items generated, action items closeout, and the statement of launch readiness memorandum from the review chairpersons.

**1.4 Mission Readiness Review (MRR)** - For missions conducted by the SSOPD, the Director of SSOPD shall at his discretion require that a mission readiness review be conducted at the directorate level.

If this review is required, the Director of SSOPD or his designee shall chair the review and appoint the review board. SSOPD will maintain the review board appointment memorandum. The organization with prime responsibility will maintain the attendance list, presentation material, action items generated memo, action items closeout, and the statement of mission readiness from the review chairman in the project file.

**1.5 Preliminary Design Review (PDR)** - For projects or product development conducted by the SSOPD, the Director of SSOPD may require that a PDR be conducted independently of the individual

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office review process for projects and products. If the PDR is required, the Director of SSOPD, or designee, will chair the review and appoint the review board. The records of this review will be maintained by the SSOPD, in the PDR file, and will consist of the review board appointment memorandum, attendance list, presentations, action items generated, action items closeout, and the memo from the review chair indicating recommendations for proceeding with the effort.

**1.6 Critical Design Review (CDR)** - For projects or product development conducted by the SSOPD, the Director of SSOPD may require that a CDR be conducted independently of the individual office review process for projects and products. If the CDR is required, the Director of SSOPD, or his designee, will chair the review and appoint the review board. The records of this review will be maintained by the SSOPD, in the CDR file, and will consist of the review board appointment memorandum, attendance list, presentations, action items generated, action items closeout, and the memorandum from the review chairman indicating recommendation for proceeding with the effort.

**1.7 Executive Safety Committee (ESC) Meetings** - The Chief, Safety Office, Code 803, will schedule a monthly ESC meeting and be responsible for the presentations. The ESC provides a forum for meaningful discussion of, and a channel for input to, management's decisions relative to occupational safety and health matters. The ESC meeting is also intended for management awareness of the general status of safety at the WFF and any issues dealing with safety. The ESC will review the WFF portion of the GSFC Safety and Mission Assurance Annual Operating Agreement; Emergency Response Plans, mishap and injury statistics; adequacy of existing and new safety policies and goals; and safety and health training requirements. The Council includes senior staff as well as employee representatives. The Director of SSOPD or his designee will chair the council. The records for this meeting will be maintained by Code 803, in the ESC file and will consist of the attendance list, presentations, action items generated, action items closeout, and any recommendations made by senior staff.

**1.8 Environmental Management Systems (EMS) Review** - The review for WFF is chaired by the Director of SSOPD. Membership is composed of senior level individuals knowledgeable of their directorate's concerns and policies with respect to the environmental program. All directorates and major partners at WFF will be represented. This review is intended to ascertain the status and any issues related to the environmental program at WFF, and to help advocate and direct future efforts of the committee. The presentations shall be made by Code 250 or their representatives. Code 250 shall be responsible for scheduling this annual review. The records of this review will be maintained by the Code 250 and will consist of the attendance list, presentation material, action items generated, action items closeout, any recommendations from the review team, and any plans adopted by the committee.

**1.9 Systems Review** - Projects, missions, investigations and products managed by the SSOPD will occasionally require systems reviews. Due to size, complexity, and schedules associated with projects managed by SSOPD, it may be more reasonable to have the review conducted by qualified personnel who are located at WFF, but are not directly involved with the project being reviewed, than to have a review team led by the Office of System Safety and Mission Assurance (OSSMA). To this end, the Director of SSOPD and the Director of OSSMA will consider each system review on a case-by-case basis and reach an agreement as to the make-up of the review board and who will conduct the review.

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The records will be maintained by the office with programmatic responsibility and will consist of attendance list, presentation material, action items generated, action item close out, recommendations from the board, and the approval letter from the convening authority stating that in the board's opinion the project, mission, or product can continue to the next phase.

**1.10 Airworthiness Review Board (ARB)** - The Director of SSOPD will appoint, with appropriate supporting office concurrence, members to the ARB. The ARB will perform an airworthiness review of all modifications to WFF aircraft and of all user-supplied equipment installed on WFF aircraft. The ARB will also conduct an airworthiness final installation inspection of mission-configured WFF aircraft prior to flight activity. The Aircraft Office will maintain the following records of this board: presentation materials, attendance list, meeting minutes, action items generated, action items closeout, and the Safety of Flight Release Memorandum. The Directorate office shall maintain the board appointment letter.

**1.11 Annual Anomaly Review** – Review of the Suborbital Research Program's project's anomalies will be conducted annually by SMD, Office of the Chief Engineer, and the NASA Office of Safety and Mission Assurance (OSMA).

In accordance with the requirements of NPR 7900.3, *Aircraft Operations Management Manual*, Airborne Science Project anomalies are reviewed as part of the NASA's Inter-Center Aircraft Operations Panel (IAOP). The projects will maintain the following records: presentation material, attendance list, meeting minutes, action items generated, action items closeout.

## **2.0 WAIVERS, DEVIATIONS, VARIANCES**

Waivers, deviations, and/or variances granted or rejected by SSOPD as the result of any of the above reviews or as a direct request by a customer or a supporting office are considered records and will be maintained by SSOPD. The record will consist of the request, the accompanying safety analysis if applicable, and the document granting or denying. These records will be maintained separately from the records maintained for each review.

## **3.0 APPROVAL TO PROCEED**

Following completion of all required development, documentation, action item closures, and other activities associated with a mission, an approval to proceed request will be generated by the Project Manager for signature by the Director of SSOPD, or his designee, authorizing approval to proceed. The Project Manager will maintain this record.

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### **Appendix A – Definitions**

- A.1 SSOPD Management Staff - Code 800 Office Chiefs, Code 800 Quality Assurance Specialist, Code 800 Administrative Officer, Code 800 Administrative Specialist, Code 800 Associate Director for Special Projects, Code 800 Deputy Director for Business, Code 800 Deputy Director for Strategic Integration & Development, Code 800 Technical Director, Code 800 Senior Advisor for Education & Leadership, Code 800 Deputy Director, and the Code 800 Director of SSOPD. Meetings are chaired by the Director of SSOPD or his designee. In meetings or reviews where the management staff is required to attend, other designated representatives may substitute and a majority will normally be acceptable to carry on business.
- A.2 Wallops Senior Staff - Senior Management Officials of all Codes at WFF (100, 200, 300, 400, 500, 600, 700, 800), an Equal Opportunity (EO) representative, and a representative from the Office of Human Capital Management (OHCM). Meetings are chaired by the Director of WFF. In meetings or reviews where Wallops Senior staff is required to attend, other representatives may be designated to attend and normally a majority will be acceptable to carry on business.

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## Appendix B – Acronyms

ARB	Airworthiness Review Board
ASC	Aviation Safety Council
ASO	Aviation Safety Officer
ATP	Approval to Proceed
CDR	Critical Design Review
CMC	Center Management Council
EMS	Environmental Management System
EO	Equal Opportunity
ESC	Executive Safety Committee
IAOP	Inter-center Aircraft Operations Panel
LRR	Launch Readiness Review
MRR	Mission Readiness Review
MSR	Monthly Status Review
OHCM	Office of Human Capital Management
PDR	Preliminary Design Review
RRR	Range Readiness Review
SSOPD	Suborbital and Special Orbital Projects Directorate
WFF	Wallops Flight Facility

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**CHANGE HISTORY LOG**

<b>Revision</b>	<b>Effective Date</b>	<b>Description of Changes</b>
Baseline	April 29, 1999	Initial Release
A	February 22, 2000	Organization name change. P7 Records - revised. Addition of Section 8.15 Waivers
B	August 17, 2000	P7. Quality Records: Removed Airworthiness Review Board File Added Appointment letters 1.1 Changed title of "Directorate Status Review" to "Code 800 Technical Review". Added "as appropriate" after bi-monthly -- to the Technical Review 1.2 Change "the Director of SSOPD will determine which missions required a RRR" to "the Assistant Director for Project Support will determine..." 1.11 spelled out NCR, added the word "fiscal" before year's missions. 1.12 removed the word "Quarterly" from title
C	December 5, 2000	P7. Changed title of "Directorate Status Review File" to Code 800 Technical Report File" 1.1 Changed "Review" to "Report" throughout paragraph 1.2 Change in QR Custodian - the attendance list from this review will be quality record for the presenting organization 1.14 Added Safety of Flight Release Memorandum to the quality records maintained by Code 830
D	August 1, 2003	Format Revised to be compliant with latest revision of GPG 1410.1. Removed the word "quality" when mentioning records. P.4 Removed the reference: GPG 8700.4 P.8 Corrected Record Custodians and the Record Retention Schedule 1.1 Removed "Code 800 Technical Report" replaced with Monthly Status Reviews 1.8 Changed Quarterly Safety Review to Executive Safety Council Meetings 2.0 Added deviations and variances to section 3.0 Added section on Approval to Proceed
E	February 16, 2005	Modified to clarify requirements in accordance with Center Rules Review recommendations Updated GPG reference to GPR Removed the Quality Management System Review and the Sounding Rocket and Balloon Mishap and Anomaly Review.
F	September 8, 2008	Updated template P.8 Updated Record Custodians of the QASR and the ATP records P.10(a) Added Administrative Specialist and Quality Assurance Specialist to SSOPD Management Staff P.10(b) Added Codes 600 and 700 to Wallops Senior Staff, removed Code 900. Corrected title of OHR to OHCM.

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		<p>Section 1.1 Corrected the records file of the MSR to WFF by removing the attendance list and adding the agenda</p> <p>Section 1.3 Removed OSSMA</p> <p>Section 1.4 Deleted the Flight Readiness Review</p> <p>Section 1.9 QASR records are maintained by the Aircraft Office and not the SSOPD</p> <p>Section 2.0 Second sentence added "if applicable" after "accompanying safety analysis"</p> <p>Section 3.0 record of ATP is maintain by the Project Manager of the project requiring the ATP</p>
G	April 10, 2014	<p>Updated template</p> <p>1.9 Change the Title of the Environmental Program Coordination Committee Status Review to Environmental Management System Review.</p> <p>Updated Definitions</p> <p>Removed Quarterly Aviation Safety Review (QASR).</p> <p>Added Annual Anomaly Review description, also added to the records from this review to the P.8 Records Section.</p> <p>Change the name from Executive Safety "Council" to Committee.</p> <p>Changed P.3 Authority- from cancelled directive GPR 1060.2, <i>Management Review and Reporting for Programs and Projects</i> to GPR 1060.3, <i>The Goddard Governance System</i>.</p>
G	April 10, 2019	Updated Signature Authority - Administratively extended for 6 month
G	October 1, 2019	Administratively extending for 1 year.