



Procedures and Guidelines (PG)

DIRECTIVE NO. 820-PG-1410.2.1B
EFFECTIVE DATE: April 28, 2014
EXPIRATION DATE: April 28, 2020

APPROVED BY Signature: Original Signed by
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COMPLIANCE IS MANDATORY

Responsible Office: Code 820/ Balloon Program Office (BPO)

Title: BPO Configuration Management (CM) Procedure

PREFACE

P.1 PURPOSE

This CM Procedure describes identification and processing of configuration controlled items for the Balloon Program Office (BPO). It also describes the documentation control nomenclature scheme for the BPO documents and the description of the CM interface between the BPO and the individual projects, and those CM requirements for the projects.

P.2 APPLICABILITY

This CM Procedure is applicable to the BPO and to each flight or system project within the program.

P.3 AUTHORITY

GPR 1410.2, Configuration Management
800-PG-1410.2.1, Documentation Configuration Management

P.4 REFERENCES

GPR 1410.2, Configuration Management
800-PG-1410.2.1, Documentation Configuration Management

P.5 CANCELLATION

820-PG-1410.2.1A, BPO Configuration Management (CM) Procedure

P.6 SAFETY

None

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P.7 TRAINING

None

P.8 RECORDS

Record Title	Record Custodian	Retention
Controlled Document List	820 Configuration Management Officer (CMO)	*NRRS 8/103. Temporary. Destroy/delete between 5 and 30 years after program/project termination.

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

P.9 MEASUREMENT/VERIFICATION

Any CM metrics and reporting processes the projects establish shall be reviewed and signed by the Program’s Configuration Management Officer (CMO) for completeness. The Controlled Documents List (CDL) shall be maintained and posted to the lynx server.

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. Introduction

This document describes the processes to be followed by the BPO and its projects regarding configuration management (CM) functions and the CM interfaces between the Program Office and the projects. The Program Office has only a limited number of documents requiring CM. Control of Program Office CM documents will be accomplished using the processes described herein. The Program’s Controlled Documents List shall be the list of Code 820 controlled documents (both internal documents and those of external origin). The Program Office Controlled Documents List will be displayed on the lynx server and is maintained by the CMO.

All program and project personnel shall comply with the requirements of this directive to the extent applicable. However Projects may amend these procedures by obtaining a waiver from the Chief, BPO. The procedure changes shall be documented in the project CM plan that shall be approved by the Program's CMO. They shall ensure usage of the current versions of procedures and other documents in all cases. They shall maintain a Controlled Documents List to verify proper versions, and they shall use the Goddard Directives Management System for directives.

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1.1 Configuration Identification and Accessibility

Program level control document numbers shall be assigned by the Program Office's Configuration Management Officer (CMO). The CMO shall also be responsible for controlling the Program's documents and the Controlled Documents Lists, ensuring relevant documents are available through an accessible website, library, or server and that obsolete documents are annotated, removed or made unavailable for use.

2. Document Control Numbers

2.1 Program Office

All Program Office controlled documents shall be assigned unique document identifying numbers. The first three characters of the document number shall be the Program Office organizational code (e.g. 820). The next set of characters shall describe the document type (e.g., PLAN, RQMT, ICD, RPT etc.). See Attachment 1 for a list of recommended document types (the list is not all inclusive). The next set of numbers will represent the year the document was generated followed by a sequential number obtained by the CMO. An example of a unique document identifying number is: 820-PLAN-1998-1.

2.1.1 Revision

Informal revisions to a document can be made any time prior to completion of the approval process. However, when the document has been approved and released, any changes or revisions require the approval and re-release of the document. The revision review and approval process is the same as for the original release, unless the changes are administrative in nature.

Administrative revisions can be accepted to internal controlled documents and directives which will not require a full review by the stakeholders or a complete revision review and approval process. An administrative revision is a correction that does not change the substance or content of the document; it can include correction of typographical or spelling errors, changes of an editorial nature, corrections to organization codes or organization names, and/or corrections to identifiers to reference documents and URLs, etc. The Change History Log shall reflect an "Administrative Change" and the description block will reflect the changes(s) being made. The effective date on the Change History Log will reflect when the administrative revision was approved and the plan's revision letter will be changed. An administrative revision will not change the date of the document's expiration. If the changes are determined to be more than administrative a complete review and approval (signatures) will be required.

Proposed revisions can be submitted by a redlined copy of the document, or change history log, or edit changes in Word. Redlining should be done using a red colored pencil, pen, or felt tip marker. A single line through the text indicates deletions. If a block of text is to be inserted, it may be written on a separate sheet and the original document redlined to indicate where the text block is to be inserted. A record of revisions shall be maintained in the document. The format of the revision notice shall include the following information:

- Identification of each revision level.
- Summary of revision. Unless the document is very substantially revised, each change should be identified by paragraph number and briefly described. Minor corrections to spelling and syntax need not be identified.

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(The Change History Log in this document is an example of a free-form format that is easily maintained.) A new signature page shall be signed for each new revision of the document. When all approvers have signed or initialed their approval, the revised document is released.

3. Identification of Controlled Documents

All internal BPO controlled documents shall contain the BPO Control Number, document title (include Project/Program name in title), revision indicator if applicable, effective date, and an indicator that BPO is the responsible organization. This information shall be included in a Controlled Documents List. Beginning with the approval of this version of this document, a footer shall be placed on the first page of controlled documents indicating where to confirm the proper revision status.

For documents subject to revision, a revision/change history log shall be inserted in the document. The log shall contain revision, change descriptions, and change dates, as a minimum.

4. Selection of Controlled Items

The Program Office does not produce any hardware or software items that require configuration control. However, they produce a limited number of documents under configuration control for example: Program Plan, Risk Management Plan, and Configuration Management Plan. Identification of program documents to be placed under configuration control shall be the responsibility of the Chief or Deputy Chief, BPO and is done on a case-by-case basis.

All changes that affect the Program Plan or Project Plans are subject to review and approval by the Program.

5. Controlled Documents List (CDL).

The CMO shall maintain the Program Office's CDL. It will include, for each internal BPO controlled document, the BPO control number, document title, revision indicator, and effective date. Documents of external origin will be maintained on the BPO CDL to include at least the document title and the effective date. The CMO shall be responsible for proper posting of all documents and changes on the lynx server.

6. Configuration Control Board (CCB) Structure

As stated in 800-PG-1410.2.1, SSOPD Documentation Configuration Management, Section 1.1, the BPO Office Chief shall serve as the Change Control Board (CCB), and shall ensure that change control procedures are followed.

Appendix A – Definitions

Refer to GPR 1410.2 for additional definitions

- A.1 Configuration Document – documents that define requirements, design, build/production, validation, and interfaces of a product or service. *Configuration Documents are Configuration Items within this Procedure.*
- A.2 Configuration Item – designation applied to the product that has been determined to be subject to CM requirements. Products include hardware, software, processed materials, services, or any discrete portions thereof treated as a single entity in the configuration management process. *Configuration Documents are also Configuration Items within this Procedure.*
- A.3 Configuration Management Officer (CMO) – an individual whose responsibilities shall include the following:
- ◆ Assigning control document numbers to the Program level documents
 - ◆ Controlling the Program’s documents and the Controlled Documents Lists
 - ◆ Ensuring relevant documents are available through an accessible website, server, or library and that obsolete documents are annotated, removed or made unavailable for use
 - ◆ Supporting Program-level CCBs
- A.4 Controlled Document – a document that requires change control action by the responsible organization (*Program Office or Project*) before the document can be issued or altered in any way. *Controlled documents are subject to the requirements of GPR 1410.2 and of this PG.*
- A.5 Controlled Documents List (CDL) – an organization’s list of their controlled documents and critical documents of an external origin, as described in the organization’s configuration control procedures.

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Appendix B – Acronyms

BPO Balloon Program Office
CCB Configuration Control Board
CDL Controlled Documents List
CM Configuration Management
CMO Configuration Management Officer
GDMS Goddard Directives Management System

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Attachment 1
Example Document Type Categories
(This is not an inclusive list)

ANYS	Analysis Type Document
BWGS	Balloon Working Group Presentations
CMPN	Campaigns
CMPP	Conventional Mission Project Plan
CNFS	Conference Presentations
CORR	Correspondence
FORM	Controlled Forms
ITP	All Test Procedures
LIST	Lists, all lists maintained on a regular basis
LMPP	Long Duration Mission Project Plan
LOGS	Record Logs
MANL	Manuals
MEMR	Memorandums
MRCP	Mishap Response and Contingency Plan (replaced by MPCP designation starting in 2013)
MPCP	Mishap Preparedness and Contingency Plan
MSR	Monthly Status Reviews Presentation
OPS	Operations Document (normally differentiated into several other type categories)
OUTR	Outreach and Student Reports
PG	Procedures and Guidelines
PHTO	Photos
PLAN	Plans
PPNS	All Project Plans
PRGM	Program Documents
PROC	Procedural Documents
PROJ	Project Documents not specifically covered elsewhere
REQ	Requirement Documents
RPT	Most reports
RSTR	Restricted documents such as budgetary, proposals, Directors Discretionary Funds, contract information. These documents will only be available to selected individuals
RVWS	Reviews
SFTY	All safety related documents, Ground, Institutional, Flight, Project
TECH	Technical Papers
WI	Work Instruction

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CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	July 15, 2005	Initial Release
A	July 15, 2010	Overall updating of CM process including updating PG template
B	April 28, 2014	Overall updating of CM process
	April 25, 2019	Administratively extended for 1 year.

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